

訂 正 確 認 報 告 書

訂正承認日	2016年8月25日	訂正申請日	2016年8月25日
題名	Study on the intelligent transport system (ITS) in Japan : from policy, technology and partnership approaches		
著者氏名	Saad, Sed		
報告者氏名	亀山 涉 中里 秀則	確認者氏名	佐藤拓朗

本論文は、学位規則第 23 条第 1 項に照らし、学位の取消には該当しないが、訂正を要する箇所が認められたため、これに対して著者によりなされた訂正について確認した結果を下表の通り報告する。

Abstract

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 3, Line 13-16 1. The 1996 “Comprehensive Plan for ITS in Japan” which specifically defines ITS as a “comprehensive info-communications system dealing with transportation” which can “display a clear example of an advanced info-communications society project” and</p>	<p>Page 3, Line 13-15 1. The 1996 “Comprehensive Plan for ITS in Japan” which specifically defines ITS as a “comprehensive info-communications system dealing with transportation” which can “display a clear example of an advanced info-communications society project”¹ and</p>	参考文献の追加であり、訂正を認める。
<p>Page 4, Line 25-28 In a Developmental State, the state takes the leadership in catching up the technological frontier; while in an Entrepreneurial State, the state takes the leadership role in pushing the technological frontier further to e.g. create a new industry.</p>	<p>Page 4, Line 25-27 In a Developmental State, the State is catching up the technological frontier; while in an Entrepreneurial State, the State has leadership in pushing the technological frontier further to e.g. create a new industry.</p>	エディトリアル修正であり、訂正を認める。
<p>Page 5, Line 9-11 Chapter IV, entitled "Partnerships", reviews the institutional aspects of ITS, i.e. the various concepts and models of partnership, including Public-Private Partnership (PPP) and Public-Public partnership.</p>	<p>Page 5, Line 7-9 Chapter IV, entitled "Partnerships", reviews the institutional aspects of ITS, i.e. the various concepts and models of partnership, including Public-Public Partnership and Public- Private partnership (PPP).</p>	エディトリアル修正であり、訂正を認める。

Acknowledgements

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 7, Line 2-3 I would like to acknowledge the direct academic contributions following professors (by academic affiliation and English alphabetical order):</p>	<p>Page 7, Line 2-4 As both PhD student and COE researcher of a truly “glocal” and innovative Japanese Graduate School (GITS, network business department) of Waseda University, I would like to acknowledge the direct academic contributions of following professors:</p>	論文の内容とは関係のない変更であるため、訂正を認める。
<p>Page 7, Line 9-10 Beyond their examiner role, Dean Dr Kameyama has qualitatively contributed to the content, methodology and format of this academic work.</p>	<p>Page 7, Line 10-11 Beyond his examiner role, Dean Dr Kameyama has decisively and qualitatively contributed to the content, methodology and format of this academic work</p>	論文の内容とは関係のない変更であるため、訂正を認

Page 7, Line 16 MIT (2007)	Page 7, Line 17 MIT (2007-2008)	める。 論文の内容とは関係のない変更であるため、訂正を認める。
Page 7, Line 25 Dr. Nakamura, Head of ITS, for several discussion on ITS,	Page 7, Line 26 Dr. Nakamura, Head of ITS, for several discussions on ITS,	論文の内容とは関係のない変更であるため、訂正を認める。
Page 8, Line 19 September 2009, Tokyo	Page 8, Line 22-25 I dedicate this reseach to Nikola Tesla (1856-1943), the precursor of Intelligent Transport System, and to my paternal grand-father who made -his and mine- dream true: an outstanding global education. September 2009, Tokyo	論文の内容とは関係のない変更であるため、訂正を認める。

List of Figures and Tables, Table of Contents

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
Page 9-10 図表一覧のページ番号	Page 9-10 図表一覧のページ番号の更新	訂正に伴う事項であるため、訂正を認める。
Page 11-15 目次のページ番号	Page 11-15 目次のページ番号の変更	訂正に伴う事項であるため、訂正を認める。
Page 11, Line 40 3.2.5 Conclusion..... 72	削除	該当セクションが削除されたため、目次からの削除を認める。

<p>Page 13, Line 28 5.5.3.2.2 Illustration of a successful partnership 140</p>	<p>削除</p>	<p>該当セクションが削除されたため、目次からの削除を認める。</p>
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Chapter I Introduction

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 16, Line 5-7 As road traffic problems became societal and economic issues, a new set of technologies has emerged to address these issues, called Intelligent Transport Systems (ITS).</p>	<p>Page 16, Line 5-6 As road traffic problems became societal and economic issues, a new set of technologies has emerged, Intelligent Transport Systems (ITS).</p>	<p>エディトリアル修正であるため、訂正を認める。</p>
<p>Page 16, Line 18-20 1. the 1996 “Comprehensive Plan for ITS in Japan” which specifically defines ITS as a “comprehensive info-communications system dealing with transportation” which can “display a clear example of an advanced info-communications society project”</p>	<p>Page 16, Line 17-19 1. 1996 “Comprehensive Plan for ITS in Japan” which specifically defines ITS as a “comprehensive info-communications system dealing with transportation” which can “display a clear example of an advanced info-communications society project”²</p>	<p>参考文献の追加であり、訂正を認める。</p>
<p>Page 18, Line 3-4 In July 1996, five government bodies compiled a "Comprehensive Plan for ITS in Japan”</p>	<p>Page 18, Line 3-4 In July 1996, five government institutions brought together a "Comprehensive Plan for ITS in Japan”</p>	<p>エディトリアル修正であるため、訂正を認める。</p>
<p>Page 18, Line 6-7 <i>1. ITS is defined as a comprehensive info-communications system dealing transportation and</i></p>	<p>Page 18, Line 6-7 <i>1. ITS is defined as a comprehensive info-communications system dealing transportation³ and</i></p>	<p>参考文献の追加であり、訂正を認める。</p>
<p>Page 18, Line 8-9 <i>2. ITS can display a clear example of an advanced info-communications society project.</i></p>	<p>Page 18, Line 8-9 <i>2. ITS can display a clear example of an advanced info-communications society project⁴.</i></p>	<p>参考文献の追加であり、訂正を認める。</p>
<p>Page 18, Line 10-12 <i>3. ITS brings a dynamic and intense international competition behind the scenes in the field of technological development. Japan should seize this opportunity to take the lead in the international arena through ITS promotion.</i></p>	<p>Page 18, Line 10-12 <i>3. ITS brings a dynamic and intense international competition behind the scenes in the field of technological development. Japan should seize this opportunity to take the lead in the international arena through ITS promotion⁵.</i></p>	<p>参考文献の追加であり、訂正を認める。</p>
<p>Page 18, Line 13-14 <i>4. ITS-related sectors as automobile and high-tech industries will have significant ripple effects on the Japanese economy, for instance,</i></p>	<p>Page 18, Line 13-14 <i>4. ITS-related sectors as automobile and high-tech industries will have significant ripple effects on the Japanese economy, for</i></p>	<p>参考文献の追加であり、訂正を認める。</p>

<i>for new business creation.</i>	<i>instance, for new business creation⁶.</i>	認める。
Page 18, Line 27 4. <i>ITS-related sectors as automobile and high-tech industries...</i>	Page 18, Line 27 4. <i>ITS-related sectors as automobile and high-tech industries⁷...</i>	参考文献の追加であり、訂正を認める。
Page 22, Line 12-15 In a Developmental State, the state takes the leadership in catching up the technological frontier; while in an Entrepreneurial State, the state takes the leadership role in pushing the technological frontier further to create a new industry and, thus a market.	Page 22, Line 5-7 In a Developmental State, the State is catching up the technological frontier; while in an Entrepreneurial State, the State has leadership in pushing the technological frontier further to e.g. create a new industry and, thus a market.	エディトリアル修正であるため、訂正を認める。
Page 22, Line 20-22 They are mostly sophisticated pre-crash safety technologies, based on the wireless communication between in-vehicle devices and roadside equipments, and also between in-vehicle devices on multiple vehicles.	Page 22, Line 12-14 They are mostly sophisticated pre-crash safety technologies, based on the wireless communication between in-vehicle devices and roadside equipment, and also between in-vehicle devices on multiple vehicles.	エディトリアル修正であるため、訂正を認める。
Page 23, Line 26-27 Creation of new ITS industry (Chapter VII): Japan stated it wanted to use ITS as engine and test bed for next generation information communication industries	Page 23, Line 15-16 Creation of new ITS industry (Chapter VII): Japan stated it wanted to use ITS as engine and “test bed for next generation information communication industries ^{8”}	参考文献の追加であり、訂正を認める。
Page 24, Line 4-17 From the New IT Reform Strategy (NITRS) and the 8 th safety program, the following specific statements are related to post-crash systems: <ul style="list-style-type: none"> • <i>The government will improve rescue and emergency services systems and emergency medical care services by promoting closer liaison and cooperation with emergency-related organizations such as emergency medical facilities.</i> • <i>collaboration between the various involved government agencies as well as the private sector to realize advanced ITS and leads Japan into the world's safest road traffic society.</i> • <i>The improved systems will be designed to deal with road traffic accidents to save the lives of people injured in traffic accidents and to minimize the harm and damage caused by accidents.</i> Although these post-crash concerns and policy goals are identified by official documents, no post-crash safety measures are currently under study as in other safety areas such as pre-crash safety measures in Japan.	Page 23, Line 20-23 From the New IT Reform Strategy (NITRS) and the 8 th safety program, these post-crash concerns and policy goals are identified by official documents, no post-crash safety measures are currently under study as in other safety areas such as pre-crash safety measures in Japan.	冗長な記述を削除し、簡潔に内容を表現する形式に変更している。論旨に影響はないため、訂正を認める。
Page 25, Line 19-21 Chapter VII, entitled "New Industry" , looks first into the role of PPP in the creation of the new industry. What the public sector does	Page 24, Line 27 - Page 25, Line 1 Chapter VII, entitled "New Industry" , looks first into the role of PPP in the creation of the new industry. What the public sector	不明確な表現を修正したものと見て、訂正を認

(or doesn't) in relation to ITS do have a direct and profound effect on industry structure and business models.	does (or doesn't) in connection to ITS strongly influence several industries (Transport, Car, Telecom...) structure and related business models.	める。
<p>Page 25, Line 26 - Page 26, Line 2</p> <p>Japan has been already successful in translating its strengths in vehicle, telecom and electronics technology into VICS.</p> <p>In addition, Japanese consumers have traditionally been early adopters of new and often disruptive technology-based products and services such as VICS or i-mode earlier.</p> <p>ITS deployment is expecting to create ITS related markets for infrastructures, terminal equipment and applications.</p>	<p>Page 25, Line 5-11</p> <p>Japan has been very successful in integrating its technological superiority in automobile, telecom and IT into ITS locally, into a converging disruptive technological innovation: VICS. Furthermore, Japanese buyers have habitually been early adopters of novel and often disruptive technologies and application such as VICS or I-mode earlier.</p> <p>ITS deployment is expecting to create related markets for infrastructures, equipment and applications.</p>	不明確な表現を修正したものと して、訂正を認める。
<p>Page 27, Line 9 - Page 28, Line 2</p> <p>In any society, people need to get from the places where they live to the places where they work (study, shop...) and back again, conveniently, safely, and affordably. As transport plays a major role in the society, moving both people and goods, society's decision-makers designed policies to improve transport efficiencies. Transport policy decision-makers have long taken a variety of traditional measures to address these road traffic problems such as accidents and congestion. These measures include the construction of additional roads and the improvement of public transport facilities and constraining vehicle use through taxes and traffic regulations.</p>	<p>Page 27, Line 2-3</p> <p>As transport plays a major role in the society, moving both people and goods, society's decision-makers designed policies to improve transport efficiencies.</p>	冗長な記述を削除し、簡潔に内容を表現する形式に変更している。論旨に影響はないため、訂正を認める。
<p>Page 28, Line 12-16</p> <p>In the dissertation, the author has adopted the Japanese definition of ITS as mentioned in the "Comprehensive Plan for ITS in Japan" issued by Prime Minister Office in 1996, which is as follows: <i>ITS as a "comprehensive info-communications system dealing with transportation"</i> which can "display a clear example of an advanced info-communications society project".</p>	<p>Page 27, Line 13-17</p> <p>In the dissertation, the author has adopted the Japanese definition of ITS as mentioned in the "Comprehensive Plan for ITS in Japan" issued by Prime Minister Office in 1996, which is as follows: <i>ITS as a "comprehensive info-communications system dealing with transportation"</i> which can "display a clear example of an advanced info-communications society project".</p>	参考文献の追加であり、訂正を認める。
<p>Page 28, Line 18-22</p> <p>Beside the above mentioned "Comprehensive Plan for ITS in Japan", as Japan's Prime Minister Office set a national ITS policy as part of a national telecom policy, Japan stated it wanted to use ITS as engine and test bed for next generation info-communication industries by the introduction of 3G and 4G mobile systems.</p>	<p>Page 27, Line 19-23</p> <p>Beside the above mentioned "Comprehensive Plan for ITS in Japan", as Japan's Prime Minister Office set a national ITS policy as part of a national telecom policy, Japan stated it wanted to use ITS as engine and "test bed for next generation info-communication industries"¹⁰ by the introduction of 3G and 4G mobile systems.</p>	参考文献の追加であり、訂正を認める。
<p>Page 28, Line 22-25</p> <p>In 1999, the Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that ITS</p>	<p>Page 27, Line 23 - Page 28, Line 1</p> <p>In 1999, the Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that</p>	参考文献の追加であり、訂正を認める。

<p>would be a major driving force for info-telecom network where ITS and its related R&D are considered as a sub-field of the “info-communication”</p>	<p>ITS would be a major driving force for info-telecom network where ITS and its related R&D are considered as a sub-field of the “info-communication”¹¹.</p>	<p>認める。</p>
<p>Page 28, Line 25 - Page 29, Line 1 In 2001, "e-Japan Strategy" advocates the development of Japan as the world's most advanced telecom nation by pursuing the development of ITS systems as part of a strategy to develop its telecommunication infrastructure.</p>	<p>Page 28, Line 1-4 In 2001, "e-Japan Strategy" advocates Japan becoming the world's most advanced telecom country by pursuing the development of ITS systems as part of a strategy to develop its telecommunication infrastructure.</p>	<p>エディトリアル修正であるため、訂正を認める。</p>
<p>Page 28, Footnote 1995 is the year where Japan directly linked the transportation and telecommunication in an official document (Comprehensive Plan for ITS in Japan, see chapter II)</p>	<p>Page 27, Footnote 1995 is the year where Japan directly linked the transportation and telecommunication in an official document (Comprehensive Plan for ITS in Japan http://www.kantei.go.jp/jp/singi/it2/pc/kaikaku.pdf , see chapter II)</p>	<p>参考文献の追加であり、訂正を認める。</p>
<p>Page 29, Line 1-3 The 2001 “Science and Technology Basic Plan” considers ITS as a sub-field of the info-telecommunication field which is one of four priority fields.</p>	<p>Page 28, Line 4-5 The 2001 “Science and Technology Basic Plan” considers ITS as a sub-field of the info-telecommunication field which is one of four priority fields¹².</p>	<p>参考文献の追加であり、訂正を認める。</p>
<p>Page 29, Line 3-5 u-Japan Strategy 2005 aims at promoting the development of a ubiquitous network infrastructure that enables access to network at “anytime, anyplace, by anything and anyone” and also aimed at creating applications for ITS.</p>	<p>Page 28, Line 6-8 u-Japan Strategy 2005 aims at promoting the development of a ubiquitous network infrastructure enabling network access “anytime, anyplace, by anything and anyone” and also aimed at creating applications for ITS.</p>	<p>エディトリアル修正であるため、訂正を認める。</p>
<p>Page 29, Line 6-8 Japan consider ITS as a tool and an opportunity to apply and develop telecommunication infrastructure for the transport sector while many countries have positioned their ITS plans as integral parts of their traffic and transportation policies.</p>	<p>Page 28, Line 9-11 Japan consider ITS as a tool and an opportunity to apply and develop telecommunication infrastructure for the transport sector while most nations positioned ITS as parts of their transportation policies.</p>	<p>エディトリアル修正であるため、訂正を認める。</p>
<p>Page 29, Line 12-25 MLIT¹, Japan The Intelligent Transport Systems is intended for advances in navigation systems, establishment of electronic toll collection, assistance for safe driving, optimization of traffic management and increasing efficiency in road management by building an integrated system of people, roads and vehicles utilizing advanced data communication technologies. While providing users with quick information required for their safe and comfortable travel in ways easy to understand, ITS makes automated vehicle operations possible by making the most of information and control technology. With these operations, ITS makes it possible for users to enjoy a high level of use of roads and reduces many of the workloads commonly</p>	<p>削除</p>	<p>冗長な記述を削除している。論旨に影響はないため、訂正を認める。</p>

<p>associated with driving, walking, and cycling. In this way, ITS will accomplish a major improvement in road transport safety, efficiency and comfort, and traffic operations and congestion, thereby significantly contributing to the realization of an improved quality of life and environmental conservation.</p>		
<p>Page 29, Line 26 – Page 30 Line 11 ITS Japan² ITS offers a fundamental solution to various issues concerning transportation, which includes traffic accidents, congestion and environmental pollution. ITS deals with these issues through the most advanced communications and control technologies. ITS receives and transmits information on humans, roads and automobiles. By creating ideal traffic conditions, ITS system will reduce traffic accidents and congestion while saving energy and protecting the environment. ITS requires not only the roads to be intelligent but variety of transportation, such as railroad, aviation and marine, to cooperate with each other. ITS is a national level project that will even change the system of society and it has great potential to create new industries and markets. ITS market is expected to expand rapidly over the next few decades. Japan, as a major technological power, must work to pioneer new business opportunities by engaging in ITS-related research and development needed for constructing new road transport systems, thereby contributing to the well-being of the world.</p>	<p>Page 28, Line 16-29 ITS Japan¹³ For ITS Japan (www.its-jp.org) ITS offers “a fundamental solution to various issues concerning transportation, which includes traffic accidents, congestion and environmental pollution. ITS deals with these issues through the most advanced communications and control technologies. ITS receives and transmits information on humans, roads and automobiles. By creating ideal traffic conditions, ITS system will reduce traffic accidents and congestion while saving energy and protecting the environment. ITS requires not only the roads to be intelligent but variety of transportation, such as railroad, aviation and marine, to cooperate with each other. ITS is a national level project that will even change the system of society and it has great potential to create new industries and markets. ITS market is expected to expand rapidly over the next few decades. Japan, as a major technological power, must work to pioneer new business opportunities by engaging in ITS-related research and development needed for constructing new road transport systems, thereby contributing to the well-being of the world”.</p>	<p>参考文献番号の修正、参考文献の追加、引用の明確化の修正であり、訂正を認める。</p>
<p>Page 30, Line 20-21 e.g. ITS World Congress 2008⁴: Intelligent Transport Systems</p>	<p>Page 29, Line 9-10 e.g. ITS World Congress (www.itsworldcongres.org) 2008¹⁶: Intelligent Transport Systems</p>	<p>参考文献の追加であり、訂正を認める。</p>
<p>Page 31, Line 4-5 “Telematics” is a French word coined by combining “telecommunication” and “informatics”.</p>	<p>Page 29, Line 17-18 “Telematics” is a French word combining two words “telecommunication” and “informatics”.</p>	<p>エディトリアル修正であるため、訂正を認める。</p>
<p>Page 31, Line 15-25 Just as the proliferation of telecommunication has transformed and enhanced everyday business and personal life, ITS has the potential to be a transforming force for the transportation. The advent of ITS is part of the global spread of telecom as ITS applies information and communication technologies to transportation. ITS, just as ICT (Information and Communication Technologies), can be considered</p>	<p>Page 30, Line 6-13 ITS is part of the global expansion of telecom as ITS applies information and communication technologies to transportation. ITS, just as ICT (Information and Communication Technologies), can be considered as accelerator, driver and multiplier of innovations¹⁷. ITS, as ICT before, is pervasive and is not anymore considered as an end by itself. ITS has obvious benefits, not only</p>	<p>冗長な記述を削除し、簡潔に内容を表現する形式に変更している。論旨に影響はないため、訂</p>

<p>as accelerator, driver and multiplier of innovations⁵. ITS, as ICT before, is pervasive and is no longer seen as an end in itself. ITS has obvious benefits, not only for the transportation sector but also for economic growth as a generic technology, as well as an emerging industry. The benefits of the technology innovation related to ITS new solutions and accrue from the facilitation of types of and economic opportunities that ITS deployment makes possible.</p>	<p>for the transportation sector but also for economic growth as a generic technology, as well as an emerging industry. The benefits of the technological innovation related to ITS create and stimulate new solutions and business opportunities which make ITS deployment feasible</p>	<p>正を認める。</p>
<p>Page 32, Line 9-14 The first phase mainly applies IT to specific tasks, but without changing their characteristics. It substituted computers for labor in car industries to speed up execution the execution of traditional tasks, to increase their reliability and to lower their cost. IT has been introduced by Japanese car makers into the vehicle through in-vehicle electronics components. This first phase generally provides savings of time and money. IT has been used to improve the ways traditionally things are done.</p>	<p>Page 30, Line 22 - Page 31, Line 2 The first phase applies IT to tasks, but without changing their characteristics. It substituted computers for labor in car industries to accelerate implementation of tasks, to increase reliability and to decrease cost. IT has been introduced by Japanese car makers into the vehicle through in-vehicle electronics components. This first phase provides savings of time and money.</p>	<p>冗長な記述を削除し、簡潔に内容を表現する形式に変更している。論旨に影響はないため、訂正を認める。</p>
<p>Page 32, Line 16-23 Like many other parts of private or public sectors, the construction creation and operation of transport infrastructure is being transformed by telecommunications. In the second phase, entirely new approaches new approaches to solving problems and conducting business appear through new ways of thinking about problems and achieving goals. Indeed, as traffic problems are rapidly getting worse, traditional approaches (i.e. increasing roads) to address these problems are having only limited results. New technologically advanced telecom approaches emerged to address these problems, Intelligent Transport Systems (ITS), as shown in Figure 1.4</p>	<p>Page 31, Line 4-11 Like many other parts of private or public sectors, the establishment and operation of transport infrastructure is being changed by telecommunications. In the second phase, totally innovative methods appear to solving problems and achieving goals. Indeed, as traffic problems got worse, conventional approaches (i.e. increasing roads) are having only limited results. New telecom approaches emerged: Intelligent Transport Systems (ITS), as shown in Figure 1.4</p>	<p>冗長な記述を削除し、簡潔に内容を表現する形式に変更している。論旨に影響はないため、訂正を認める。</p>
<p>Page 33, Line 18-21 This concept of ubiquity reflects explain the trend where computing/communicating devices become increasingly invisible or transparent, embedded, intelligent, and deployed in a variety of settings such as the home, office and vehicle.</p>	<p>Page 32, Line 10-12 This concept of ubiquity describes the ICT development where devices become invisible or transparent, smart and installed in various location such as home, office and vehicle.</p>	<p>冗長な記述を削除し、簡潔に内容を表現する形式に変更している。論旨に影響はないため、訂正を認める。</p>

Chapter II Policy

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 35, Line 6-8 For Weiss, the industrial-technological transformation of an economy involves the capacity for generating innovations: innovation policy should be keeping up with technological policy⁷.</p>	<p>Page 34, Line 6-8 For Weiss, the technological transformation of an economy involves the aptitude for creating innovations: innovation policy should be keeping up with technological policy¹⁹.</p>	<p>エディトリアル修正であるため、訂正を認める。</p>
<p>Page 36, Line 4-7 Industrial policies that are in accordance with a developmental state vision become less adequate as technology gaps are reduced and as innovation is needed. Indeed the goals of the catching-up industries do fit specifically to the “developmental state” path of the leading economies.</p>	<p>Page 35, Line 1-3 Developmental State policies become less adequate as technology gaps are reduced and as innovation is needed. Indeed, the goals of the catching-up industries do fit specifically to the “developmental state” path of the leading economies.</p>	<p>冗長な記述を削除し、簡潔に内容を表現する形式に変更し、エディトリアル修正をしている。論旨に影響はないため、訂正を認める。</p>
<p>Page 36, Line 12-15 Schumpeter¹² considers economic development with innovation as the internal force of change, carried out by entrepreneurial leadership. The entrepreneurial function is defined by the introduction of technological innovation into an economic system.</p>	<p>Page 35, Line 8-11 Schumpeter²⁴ considers economic development with innovation as the internal force of change, carried out by entrepreneurial leadership where the entrepreneurial function is defined by the introduction of technological innovation into an economic system.</p>	<p>二つの文を一つにし、引用の範囲を明確化しているため、訂正を認める。</p>
<p>Page 36, Line 25 - Page 37, Line 16 Ebner¹⁶ states that it may be argued that entrepreneurship resembles a distinct set of state functions, which requires a conceptual framework of its own: the entrepreneurial state. Yu¹⁷ contends that the entrepreneurial state is introduced by arguing that governments may act as entrepreneurs when their agents exercise alertness in the discovery of development opportunities. The behavioral dimension of entrepreneurship constitutes a key concern of the Schumpeterian theory of the state. Schumpeter¹⁸ modeled economic development as an evolutionary process, driven by the entrepreneurial introduction of innovation in an established economic setting. This entrepreneurial function is carried out by historically specific agents whose leadership position enables them to enforce change by introducing novelty, which means that even government may carry out the entrepreneurial function in the setting</p>	<p>Page 35, Line 21 - Page 36, Line 3 Yu²⁸ contends that governments may act as entrepreneurial agents aiming at innovation opportunities. The behavioral dimension of entrepreneurship constitutes a key concept of the Schumpeterian theory of the state. Schumpeter²⁹ defined economic development as driven by the entrepreneurial introduction of innovation. This entrepreneurial function is initiated by agents who enables them to enforce change through innovation, where government may carry out the entrepreneurial function³⁰. Schumpeter’s³¹ concept includes the idea of an entrepreneurial state” which carry out the entrepreneurial function directly. Ebner³² points out that the entrepreneurial state promotes innovation as a socio-economic process which would determines the carrying out of the entrepreneurial function, namely introducing novelty in an economic system.</p>	<p>冗長な記述を削除し、エディトリアル修正をして引用の範囲を明確化しているため、訂正を認める。</p>

<p>of capitalist development quite in accordance with the notion of entrepreneurship as institutional leadership. Schumpeter's¹⁹ concept includes the idea of an entrepreneurial state²⁰: the state could carry out the entrepreneurial function directly by exercising economic leadership.</p> <p>Ebner²⁰ points out that the notion of the entrepreneurial state addresses the policy-related matter of technological innovation, institutional change and political leadership. The entrepreneurial state promotes innovation as a socio-economic process on an economy-wide scale. This innovation policy determines the performance of the entrepreneurial state in the carrying out of the entrepreneurial function, namely introducing novelty in an economic system.</p>		
<p>Page 39, Line 1-3 ARTS (Advanced Road Transportation Systems) project: the concept on road traffic through integration of roads and vehicles was pursued (late 1980s-nineties)</p>	<p>Page 37, Line 15-16 ARTS (Advanced Road Transportation Systems) traffic project through integration of roads and vehicles (late 1980s-nineties)</p>	<p>冗長性をなくすエディトリアル修正であるため、訂正を認める。</p>
<p>Page 39, Line 6-7 ASV (Advanced Safety Vehicle) project for research and development of vehicle safety technologies</p>	<p>Page 37, Line 19 ASV (Advanced Safety Vehicle) project for vehicle safety technologies</p>	<p>冗長性をなくすエディトリアル修正であるため、訂正を認める。</p>
<p>Page 39, Line 16-17 SSVS (Super Smart Vehicle System) project for intelligent vehicle traffic system</p>	<p>Page 37, Line 27 SSVS (Super Smart Vehicle System) project for intelligent traffic system</p>	<p>冗長性をなくすエディトリアル修正であるため、訂正を認める。</p>
<p>Page 39, Line 23-28 In the early eighties, Japanese ITS projects have been initiated by the Ministry of Construction (MOC). In late eighties, hegemony shifted to the Ministry of Post and Telecommunication (MPT) and the Ministry of International Trade and Industry (METI) that were given responsibility for industrial and telecommunication policies after recognition that Japan lagged in info-telecommunication technologies.</p>	<p>Page 38, Line 4-9 Public Sector initiatives on Japanese ITS projects have been initiated by the Ministry of Construction (MOC) in the early eighties then have been shifted in the late eighties to the Ministry of International Trade and Industry (METI) and the Ministry of Post and Telecommunication (MPT) that were given responsibility for industrial and telecommunication policies after recognition that Japan lagged in info-telecommunication technologies.</p>	<p>冗長性をなくして簡潔に表現するためのエディトリアル修正であるため、訂正を認める。</p>
<p>Page 39, Line 28 - Page 40, Line 3 Indeed, after the shift of ITS ministerial leadership from MOC to both MITI and MPT, Japan stated it wanted to use ITS as engine and</p>	<p>Page 38, Line 11-13 Indeed, after the shift of ITS ministerial leadership from MOC to both MITI and MPT, Japan stated it wanted to use ITS as</p>	<p>簡潔に表現するためのエディト</p>

test bed for next generation info-communication industries with the concept of “making a moving car into an office or living room” ³⁰ .	locomotive for next generation info-communication technologies” ⁴² .	リアル修正であるため、修正を認める。
<p>Page 40, Line 16-20</p> <p>In 1995, the Advanced Information Telecommunications Society Promotion Headquarters (headed by the Prime Minister) determined the "Basic Guidelines on the Promotion of an Advanced Information and Telecommunications Society", which included a policy guideline for promoting ITS which stated a comprehensive and systematic promotion of:</p>	<p>Page 38, Line 26 - Page 39, Line 2</p> <p>In 1995, the Advanced Information Telecommunications Society Promotion Headquarters (headed by the Prime Minister) determined the "Basic Guidelines on the Promotion of an Advanced Information and Telecommunications Society"⁴⁴, which included a policy guideline for promoting:</p>	参考文献を追加し、冗長な表現を修正しているため、訂正を認める。
<p>Page 40, Line 24</p> <p>3) International cooperation concerning ITS.</p>	<p>Page 39, Line 5</p> <p>3) International cooperation on ITS⁴⁵.</p>	参考文献を追加し、冗長な表現を修正しているため、訂正を認める。
<p>Page 41, Line 1-8</p> <p>The 1995 “Guidelines” was the first document to position ITS related projects on the level of a national and multi-ministerial project. It defined ITS as a driving force for “introducing information technology (IT) into the public sector” indispensable for promoting creation of an advanced info-communications society”. ITS was regarded both as</p> <ul style="list-style-type: none"> • a new kind of infrastructure that supports providing information and • a digitalization of management/operation of conventional transport-related infrastructure. 	<p>Page 39, Line 8-12</p> <p>These Basic Guidelines position ITS as national and multi-ministerial driving force for the creation of an advanced info-communications society. ITS was regarded both as</p> <ul style="list-style-type: none"> • information infrastructure and • a digitalization of management/operation of conventional transport-related infrastructure. 	冗長性をなくして簡潔に表現するためのエディトリアル修正であるため、訂正を認める。
<p>Page 41, Line 11-14</p> <p>Under the initiative of the Prime Minister and building on the “Basic Guidelines”, five relevant government bodies: MPT, NPA, MITI, MOT and MOC compiled the "Basic Government Guidelines for Advanced Information and Communications in the fields of Roads, Traffic, and Vehicles" in August 1995.</p>	<p>Page 39, Line 15-19</p> <p>Under the initiative of the Prime Minister and building on the “Basic Government Guidelines”, following government entities MITI, MPT, NPA, MOT and MOC decided to meet and to assemble the Basic Government Guidelines for Advanced Information and Communications in the fields of Roads, Traffic, and Vehicles in August 1995.</p>	明確な表現に変える修正を行っているため、訂正を認める。
<p>Page 42, Line 3-24</p> <p>In July 1996, the same five government bodies³² compiled a "Comprehensive Plan for ITS in Japan", presenting a 20 years ITS vision (including four expected development phases) and including the main concepts for ITS development, deployment plans as related</p>	<p>Page 40, Line 4-14</p> <p>In 1996, these five government entities⁴⁶ wrote a "Comprehensive Plan for ITS in Japan", presenting a 20 years ITS vision (including four expected development phases) and including the main concepts for ITS development, deployment and objectives.</p>	冗長な表現を削除し、参考文献を加えた上で、引用箇所を明確

<p>to ITS objectives. “ITS is defined as a comprehensive info-communications system dealing with road traffic and transportation and can display a clear example of an advanced info-communications society project³³”.</p> <ul style="list-style-type: none"> • ITS is a policy dealing with millions of vehicles nation-wide. • It is expected that developments in such ITS-related sectors as automobile and high-tech industries will have significant ripple effects on the Japanese economy, for instance, for new business creation, at a time when economic difficulties are forecast to continue in Japan for a while. • ITS is expected to grow into the core multimedia mobile communications technology with huge market potential in the 21st century. Hope runs high for future success of ITS-related businesses resulting from creation of a variety of applications, just as mobile communications systems have succeeded. • ITS has been promoted not only by Japan, but also by the U.S. and countries in Europe, with a considerable amount of resources being expended by these countries. In this respect, ITS brings an dynamic and intense international competition behind the scenes in the field of technological development and international standardization. Japan should seize this opportunity to take the lead in the international arena through ITS promotion. 	<p>ITS is defined as a “comprehensive info-communications system dealing with road traffic and transportation and can display a clear example of an advanced info-communications society project^{47 48”}”. The plan states that</p> <ul style="list-style-type: none"> • Developments in ITS-related automobile and high-tech industries will have significant impacts on the Japanese economy for new business creation⁴⁹. • ITS-related businesses will result in creation of applications; just as mobile communications systems have succeeded. • Japan might take this opportunity to lead globally through ITS activities. 	<p>化しているため、訂正を認める。</p>
<p>Page 43, Line 3-7 <u>The 21 user services based on ITS System Architecture nomenclature³⁴</u> In order to clarify information and functions necessary for ITS services, 21 user services in nine development areas were divided into 56 specific user services, and then into 172 specific user sub-services, thus comprising a whole system of user services. Each sub-service was defined in detail to clarify particular services provided.</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 43, Line 9-13 The 1995 Basic Guidelines were revised in November 1998 to include new headings of:</p> <ol style="list-style-type: none"> 4) Promotion of VICS advancement, and 5) ITS promotion in local communities, enhancing the government’s ITS policy. 	<p>Page 40, Line 21-23 The 1995 Basic Guidelines added in November 1998 new items:</p> <ol style="list-style-type: none"> 4) Promotion of advanced VICS 5) promotion of ITS in local communities. 	<p>冗長な表現をなくしたエディトリアル修正のため、訂正を認める。</p>
<p>Page 43, Line 14 - Page 44, Line 18 <u>System Architecture for ITS in Japan (1999)</u> Added to the 1996 Comprehensive Plan, as telecommunication</p>	<p>Page 40, Line 24 - Page 41 Line 4 <u>System Architecture for ITS in Japan (1999)</u> Added to the 1996 Comprehensive Plan, as telecommunication</p>	<p>冗長な表現をなくしたエディト</p>

<p>technology progresses, new ITS services that were enabled by communication technologies were acknowledged.</p> <p>Therefore, in addition to the 20 user services defined in the 1996 Comprehensive Plan, the 21st user service focused on telecom, was defined in the ITS System Architecture as follows:</p> <p>(54) Utilization of information in the advanced information and telecommunications society</p> <p>(55) Utilization of information related to multi-modal transport</p> <p>(56) Coordination of ITS functions with advanced information and telecommunications society</p> <p>ITS system architecture development started in January 1998. Japanese government had been actively involved in R&D of specific technologies that could become ITS core technologies, and VICS, main application of ITS, had already been in service. The “System Architecture” describes how a system would be resulting from research and implementation activities for each constituent system.</p> <p>The System Architecture document consists of:</p> <ul style="list-style-type: none"> ▪ The summary section presents key points in ITS System Architecture content ▪ The main text presents and summarizes concepts and conditions concerning construction objectives, achievements, and application objectives. It gives an overview of “User Services, Logical and Physical Architecture, Standardization Candidate Areas”. ▪ The “Detailed Materials” consists of descriptions of detailed documentation of “User Services” provided under “ITS, Logical and Physical Architecture”. ITS interested parties in government, private sector, and academia^{VI} are strongly advised to refer to “Detailed Materials” for standardization, for ITS research, and for design and development specific ITS systems. 	<p>technology progresses, new ITS services that were enabled by communication technologies were acknowledged by utilizing and coordinating ITS information related to multi-modal transport in the advanced information and telecommunications society</p>	<p>リアル修正のため、訂正を認める。</p>
<p>Page 44, Footnote</p> <p>We can see another example of collaboration promoted by the entrepreneurial state, within a National Innovation System</p>	<p>削除</p>	<p>対象となる本文が削除されたため、訂正を認める。</p>
<p>Page 44, Line 21- Page 45, Line 2</p> <p><u>Telecommunications Technology Council (TTC) “Info-communications Systems of ITS” report (1999)</u></p> <p>In 1999, the Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that ITS</p>	<p>Page 41, Line 7-13</p> <p><u>“Info-communications Systems of ITS” report (1999) from the Telecommunications Technology Council (TTC)</u></p> <p>The Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that “ITS, as a sub-</p>	<p>冗長な表現を削除し、参考文献を追加したため、訂正を認める。</p>

<p>would be a major driving force for the Ubiquitous Society. In this report, ITS and its related R&D are considered as a sub-field of the Info-telecommunication. The report reviewed the current state of ITS and formulated technologies development and deployment targets, with some focus on next generation of high-speed mobile communications.</p>	<p>field of the Info-telecommunication, would be a major driving force⁵⁰ for the Ubiquitous Society, with technologies development and deployment focus related on next generation of high-speed mobile communications.</p>	
<p>Page 45, Line 4-5 As the IT revolution progressed despite the Japanese economy recession, ITS has come to be regarded as a means of economic revitalization.</p>	<p>Page 41, Line15-16 As the IT revolution progressed despite the economy recession, ITS is regarded as a stimulant for economic revitalization.</p>	<p>冗長な表現をなくしたエディトリアル修正のため、訂正を認める。</p>
<p>Page 45, Line 8-11 Government issued policies regarding IT society where ITS is positioned as key component. The “Basic Law on the Formation of IT Society”, issued in November 2000, is implying IT-related policy which includes ITS will be given the first priority³⁵.</p>	<p>Page 41, Line 19-20 The “Basic Law on the Formation of IT Society”, issued in November 2000 IT policy which includes ITS, given first priority⁵¹.</p>	<p>冗長な表現をなくしたエディトリアル修正のため、訂正を認める。</p>
<p>Page 45, Line 13-17 In 2001, the IT Strategic Headquarters was established, headed by the Prime Minister, to which the responsibilities of the former Advanced Information and Telecommunications Society Promotion Headquarters, set up in 1994, were transferred. The newly created IT Strategic Headquarters took over the responsibility of the promotion of ITS.</p>	<p>Page 41, Line 22-25 In 2001, the IT Strategic Headquarters was established, under the Prime Minister responsibilities where the former “Advanced Information and Telecommunications Society Promotion Headquarters”, set up in 1994, were transferred. This newly created IT Strategic Headquarters took over the responsibility of the promotion of ITS.</p>	<p>エディトリアル修正のため、訂正を認める。</p>
<p>Page 45, Line 19 - Page 46, Line 6 "e-Japan Strategy" program has its basis in the "Basic Law on the Formation of an Advanced Information and Telecommunications Network Society (2000)" (see above). The stated goal is to make Japan the world’s most advanced ICT nation by 2005. The Program³⁶ defines five priority areas:</p> <ol style="list-style-type: none"> 1. Formation of advanced information communication network at the world’s highest level (provision of high speed network access) 2. Education, promotion of learning and human capacity building (computer literacy education) 3. Promotion of electronic commerce dealing (institutional establishment) 4. Computerization of administration and promotion of 	<p>Page 42, Line 2-11 "e-Japan Strategy" program originated from "Basic Law on the Formation of an Advanced Information and Telecommunications Network Society (2000)" (see above). The stated goal is having by 2005 Japan as the most advanced ICT nation. The Program defines priority areas⁵² (www.hido.or.jp):</p> <ol style="list-style-type: none"> 1. <i>Formation of advanced information communication network at the world’s highest level (provision of high speed network access)</i> 2. <i>Promotion of electronic commerce</i> 3. <i>Use among the public organizations</i> 4. <i>Establishment of advanced information communication network security and reliability</i> 	<p>冗長な表現をなくし、参考文献を明確化しているため、訂正を認める。</p>

<p>IT use among the public organizations (computerization of administrative procedures)</p> <p>5. Establishment of advanced information communication network security and reliability (establishment of information security)</p>		
<p>Page 46, Line 11-21</p> <p>While the "e-Japan Strategy program" advocates, as a national goal, development of Japan into the world's most advanced IT nation within five years, the "e-Japan Priority Policy Program"³⁷ defined concrete policies and their five-year targets.</p> <p>1/Formation of the world's most advanced information and telecommunications networks</p> <p>2/Establishment of an environment where the private sector, based on market forces, can exert its full potential and make Japan the world's most advanced IT nation within five years.</p> <p>e-Japan Priority Policy Program stated a concrete program to be implemented by the government to reach an advanced information and telecommunications network society.</p>	<p>Page 42, Line 15-21</p> <p>While the "e-Japan Strategy program focus on Japan becoming most advanced ICT country within a five years period, "e-Japan Priority Policy Program"⁵³ designed related policies within the five-year:</p> <p>1/the most advanced ICT infrastructures</p> <p>2/Establishment of an environment where the private sector, based on market forces, can exert its full potential and make Japan the world's most advanced IT nation within five years.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 46 /Line 26 - Page 47, Line 1</p> <p>In March 2001, the cabinet created the "Science and Technology Basic Plan", which stipulates that the percentage of government R&D investment to GDP be 1%.ITS related R&D is considered as a sub-field of the info-telecommunication field, which is one of four priority fields, the other three being life sciences field, environment field and nanotechnology/new materials field.</p>	<p>Page 42, Line 27-30</p> <p>In2001, the cabinet created the "Science and Technology Basic Plan", which stipulates that government R&D investment to be 1% of GDP. ITS related R&D is considered as a part of the info-telecommunication priority (the other three priorities being life sciences field, environment field and nanotechnology/new materials).</p>	<p>論旨を変更しない修正のため、訂正を認める。</p>
<p>Page 48, Line 9-10</p> <p>It also promote the use of new type of information and data services for traffic management</p>	<p>Page 44, Line 7-8</p> <p>It also promotes the use of new type of information and data services for traffic management</p>	<p>綴り修正のため、訂正を認める。</p>
<p>Page 49, Line 8 - Page 50, Line 12</p> <p>In the early eighties, Japanese ITS projects have been initiated by the Ministry of Construction (MOC). In the late eighties, hegemony shifted to the Ministry of Post and Telecommunication (MPT) and the Ministry of International Trade and Industry (METI) that were given responsibility for industrial and telecommunication policies after recognition that Japan lagged in info-telecommunication technologies. This evolution originated from setting a national ITS policy with ITS as part of a national telecom policy. After the shift of ITS ministerial leadership, Japan stated it wanted to use ITS as engine and test bed for next generation info-communication</p>	<p>Page 45, Line 8 - Page 46, Line 8</p> <p>Public Sector initiatives on Japanese ITS projects have been originated by the Ministry of Construction (MOC) in the early eighties then have been shifted to in the late eighties to the Ministry of International Trade and Industry (METI) and the Ministry of Post and Telecommunication (MPT) that were given responsibility for industrial and telecommunication policies after recognition that Japan lagged in info-telecommunication technologies. This evolution originated from setting a national ITS policy with ITS as part of a national telecom policy. After the shift of ITS ministerial leadership, Japan stated it wanted to use ITS as engine and test bed</p>	<p>冗長な記述を改め、参考文献を加えて引用を明確化しているため、訂正を認める。</p>

<p>industries³⁸ by the introduction of 3G and 4G mobile systems. "e-Japan Strategy" advocates the development of Japan as the world's most advanced telecom nation by pursuing the development of ITS systems as part of a strategy to develop its telecommunication infrastructure,</p> <p>In 1999, the Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that ITS would be a major driving force for info-telecom network: in this report, ITS and its related R&D are considered as a sub-field of the "info-communication". "ITS info-communications" looks into each of nine R&D areas set out in the "Comprehensive Plan for ITS in Japan." As the first step, the outlook for the ITS info-communications systems development in each R&D area was examined for three phases (five-year span each) from 2000 to 2015, with emphasis on the types of information and communication technologies required for each R&D area.</p> <p>The 2001 "Science and Technology Basic Plan" considers ITS as a sub-field of the info-telecommunication field which is one of four priority fields. The same plan adopted the realization of the ubiquitous network as one of its 12 achievement goals.</p> <p>Following these objectives, the realization of ITS aimed at accelerating advancement of information-related equipment, and support the progress of an advanced information and telecommunications technologies in other fields.</p> <p>u-Japan Strategy, also called u-Japan Policy (2005) aims at promoting the development of a ubiquitous network infrastructure that enables access to network at "anytime, anyplace, by anything and anyone". In addition to the fixed network (as e-Japan Strategy aimed at) wireless networks development is actively sought in u-Japan strategy, aimed at creating applications for ITS.</p>	<p>for next generation ICT industries⁵⁴ by the introduction of 3G and 4G mobile systems. "e-Japan Strategy" advocates Japan becoming the world's most advanced telecom networked country by pursuing the development of ITS systems as part of a strategy to develop its telecommunication infrastructure.</p> <p>The Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that "ITS, as a sub-field of the Info-telecommunication, would be a major driving force⁵⁵". "ITS info-communications" looks into each of R&D focus set out in the "Comprehensive Plan for ITS in Japan." As the first step, the outlook for the ITS info-communications systems development in each R&D area was examined for three phases (five-year span each) from 2000 to 2015, with emphasis on the types of information and communication technologies required for each R&D area.</p> <p>The 2001 "Science and Technology Basic Plan" considers ITS as a part of one of four priorities, the info-telecommunication one. The same plan adopted the realization of the ubiquitous network as one of its 12 achievement goals.</p> <p>u-Japan Strategy, also called u-Japan Policy (2005) aims at ubiquitous network infrastructure that enables access to network at "anytime, anyplace, by anything and anyone". In addition to the fixed network (as e-Japan Strategy aimed at) wireless networks development is actively sought in u-Japan strategy, aimed at creating applications for ITS.</p>	
<p>Page 50, Line 17-29</p> <p>The 1995 "Guidelines" defined ITS as a driving force for "introducing information technology (IT) into the public sector," indispensable for promoting creation of an advanced info-communications society".</p> <p>In 1999, the Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that ITS would be a major driving force for the Ubiquitous Society.</p> <p>"e-Japan Strategy" (2001) advocates development of Japan into the world's most advanced society. U-Japan Policy follows e-Japan</p>	<p>Page 46, Line 12-20</p> <p>The 1995 "Guidelines" defined ITS as a "driving force for introducing IT into the public sector," indispensable for the creation of an advanced info-communications society⁵⁶".</p> <p>In 1999, the Telecommunications Technology Council (TTC) mentioned that ITS become the one of the main pillar the Ubiquitous Society.</p> <p>"e-Japan Strategy" (2001) advocates Japan into the world's most advanced society. U-Japan Policy follows e-Japan Strategy at aiming Japan not only to be one of the most advanced IT nations by</p>	<p>参考文献を明示して引用を明確化し、軽微なエディトリアル修正のため、訂正を認める。</p>

<p>Strategy at aiming Japan not only to be one of the most advanced IT nations by 2005 but also at aiming to be the front-runner in offering services based on the IT infrastructure</p>	<p>2005 but also at aiming to be the front-runner in offering services based on the IT infrastructure.</p>	
<p>Page 51, Line 4-8 ITS in Japan is expected to expand traditional markets for the auto, consumer electronics and communication-related industries i.e. on the car maker's side, ITS offers means of adding new functions and values to their products or improving the quality of the products themselves.</p>	<p>Page 46, Line 27- Page 47, Line 2 ITS in Japan is expected to expand traditional markets for the auto, consumer electronics and communication-related industries i.e. on the car maker's side, ITS offers opportunities of developing new applications, values and quality to their services/products.</p>	<p>論旨を変更しない修正のため、訂正を認める。</p>
<p>Page 51, Line 14-25 In fact, Japan has been already successful in translating its strengths in vehicle, telecom and electronics technology into a converging disruptive technological innovation: VICS. In addition, Japanese consumers have traditionally been early adopters of new and often disruptive technology-based products and services such as VICS or I-mode earlier. Hopes runs high regarding ITS in Japan for additional success of ITS-related businesses resulting from creation of this variety of applications, just as mobile phones and other mobile communications systems have succeeded. ITS deployment is expecting to create ITS related markets for infrastructures, terminal equipment, and applications. It is also expected that ITS will generate markets for new technology. Some examples are future mobile communications conceptualized, beside VICS, in safety-based projects such as Smartcar (Smart Vehicle) and Smartway (Smart Highway).</p>	<p>Page 47, Line 8-17 In fact, Japan has been very successful in integrating its technological superiority in automobile, telecom and IT into ITS, into a converging disruptive technological innovation: VICS. Furthermore, Japanese buyers have habitually been early adopters of novel and often disruptive technologies and application such as VICS and I-mode earlier. Hopes in Japan that ITS technologies and applications success will duplicate mobile communications success. ITS deployment is expecting to create ITS related markets for infrastructures, equipment, and applications. Some examples are future mobile communications conceptualized, beside VICS, in safety-based projects such as Smartcar (Smart Vehicle) and Smartway (Smart Highway).</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 52, Line 5-8 Japan recognizes ITS as an opportunity to advance its industrial and trade interests. Japan pursues international ITS standardization with a view to advance Japan's competitive position.</p>	<p>Page 47, Line 23-25 Japan believes that ITS as an opportunity to spread its industrial and business (additionally to international ITS standardization) competitive position.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 52, Line 24 - Page 53, Line 1 Japan started R&D on pre-crash safety technologies in the seventies. In 1969, Japan Automobile Research Institute (JARI) was established to engage in general research on automobiles. In 1973, work on Comprehensive Automobile Traffic Control System (CACS) was initiated by the Ministry of International Trade and Industry, with the development of a route guidance system and test operations.</p>	<p>Page 48, Line 14-19 Japan started R&D on pre-crash safety technologies in the seventies, as described by ITS Japan (www.its.go.jp) In 1969, Japan Automobile Research Institute (JARI) was established to engage in general research on automobiles. In 1973, work on Comprehensive Automobile Traffic Control System (CACS) was initiated by the Ministry of International Trade and Industry⁵⁹.</p>	<p>参考文献を明示して冗長な表現を削除したため、訂正を認める。</p>
<p>Page 53, Line 2-5 During the 1980s, work on Road/Automobile Communication</p>	<p>Page 48, Line 20-23 During the 1980s, work on Road/Automobile Communication</p>	<p>参考文献を明示したため、訂正</p>

<p>System (RACS) by the Ministry of Construction, and Advanced Mobile Traffic Information and Communication Systems (AMTICS) by the National Police Agency (NPA) was carried out.</p>	<p>System (RACS) by the Ministry of Construction, and Advanced Mobile Traffic Information and Communication Systems (AMTICS) by the National Police Agency (NPA) was carried out⁶⁰.</p>	<p>を認める。</p>
<p>Page 53, Line 5-14 From the 1980s through the 1990s, Advanced Road Transportation Systems (ARTS, a Ministry of Construction project), concept on advancement of road traffic through integration of roads and vehicles was pursued. Accompanying this project were various others project, including Super Smart Vehicle System (SSVS) intended for the intelligent vehicle traffic system (a Ministry of International Trade and Industry project), Advanced Safety Vehicle (ASV) intended for promotion of research and development of vehicle safety technologies (a Ministry of Transport project), and Universal Traffic Management System (UTMS) intended for comprehensive traffic management (a National Police Agency project).</p>	<p>Page 48, Line 24 - Page 49, Line 3 From the 1980s through the 1990s, Advanced Road Transportation Systems (ARTS, a Ministry of Construction project), Super Smart Vehicle System (SSVS) intended for the intelligent vehicle traffic system (a Ministry of International Trade and Industry project), Advanced Safety Vehicle (ASV) intended for promotion of research and development of vehicle safety technologies (a Ministry of Transport project), and Universal Traffic Management System (UTMS) intended for comprehensive traffic management (a National Police Agency project)⁶¹.</p>	<p>参考文献を明示して冗長な表現を削除したため、訂正を認める。</p>
<p>Page 54, Line 1-4 ITS Japan policy aims at providing the technological foundation to the Ubiquitous Society, expanding existing businesses, at revitalizing the economy and, ultimately, at creating new industries for the auto and communication-related industries, both locally and globally.</p>	<p>Page 49, Line 17-20 ITS Japan policy aims at providing the technological foundation to the Ubiquitous Society, expanding existing businesses, at revitalizing the economy and, ultimately, at creating new business opportunities for the auto and ICT industries, both locally and globally.</p>	<p>論旨を変更しない修正のため、訂正を認める。</p>

Chapter III Technology

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 55, Line 15-19 For Schumpeter⁴², innovations are taken in a broad sense of new “combinations” of producers and means of production, which includes new products, new methods of production, opening up of new markets, utilization of new raw materials, or even the reorganization of a sector of the economy.</p>	<p>Page 50, Line 15-17 For Schumpeter⁶³, innovations include new products, new ways and means of production, new markets, or reorganization of an industry.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 55 - Page 56, Footnote ^{xi} Freeman also mentions two additional types of innovation: changes of technological systems, as a result of radical innovations that affect several branches of an economy; and changes of techno-economic paradigm which affect every other branch of the entire economy (such as the information and communication technology revolution)</p>	<p>Page 50, Footnote ^x Freeman also mentions two additional types of innovation: changes of technological systems, as “a result of radical innovations that affect several branches of an economy”; and changes of techno-economic paradigm” which affect every other branch of the entire economy (such as the information and communication technology revolution)”</p>	<p>引用符を挿入して引用箇所を明確化したため、訂正を認める。</p>
<p>Page 56, Line 6-10 Harvard’s Clayton Christensen⁴⁴ developed the following technological concepts:</p> <ul style="list-style-type: none"> • <i>sustaining</i> technologies, as technologies that improve the performance of established products along dimensions of performance; and • <i>disruptive</i> technologies, as technologies that generally under-perform established products in mainstream markets. 	<p>Page 51, Line 6-11 Harvard’s Clayton Christensen⁶⁵ (Christensen, 1997) developed the following technological concepts:</p> <ul style="list-style-type: none"> • <i>sustaining</i> technologies, as “technologies that improve the performance of established products along dimensions of performance”; and • <i>disruptive</i> technologies, as “technologies that generally under-perform established products in mainstream markets”. 	<p>引用先を明示し、引用符を挿入し、引用箇所を明確化したため、訂正を認める。</p>
<p>Page 56, Line 11-17 MIT’s Ramsden⁴⁵ added a macro-economic differentiation as follows. The developmental function is decisive in her approach to the role of the state in late industrialization as a process in implementing <i>improved</i> technology already in use abroad perceived as a process. On the other hand, the entrepreneurial function is based on the generation of <i>radical</i> technological innovations. The entrepreneurial function of government is accordingly carried out with entrepreneurship as the decision maker on production and innovation⁴⁶.</p>	<p>Page 51, Line 12-16 MIT’s Amsden⁶⁶ added a macro-economic differentiation as follows” “The developmental function is decisive in late industrialization in implementing <i>improved</i> technology already in use abroad perceived as a process. On the other hand, the entrepreneurial function is based on the generation of <i>radical</i> technological innovations. The entrepreneurial government is carried out with entrepreneurship and innovation⁶⁷”.</p>	<p>冗長な表現をなくし、引用符を挿入して引用箇所を明確化したため、訂正を認める。</p>
<p>Page 56, Line 19 - Page 57, Line 7 Christensen⁴⁷ describes a technological innovation’s framework, named hereby as “attack from below”, as consisting of the three</p>	<p>Page 51, Line 18-29 Christensen⁶⁸ describes a technological innovation’s concept, “attack from below”, comprising 3 components:</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>elements:</p> <ol style="list-style-type: none"> 1. First is the distinction between sustaining and disruptive technologies, as described above. 2. The second element is the traditional performance attributes of a product which moves to the higher end of the market. Christensen contends that this move creates opportunities for disruptive technologies to “attack from below” and occupy the lower end of the traditional market. For Christensen, it’s much easier to target potential consumers who aren’t buying at all (in the lower-end market) than to steal customers from an entrenched competitor” 3. Finally, as the new technology itself improves it may occupy that an ever-growing share of the market would drive the older products into a shrinking and ultimately a profitless corner. Once the technological innovation reaches from the early to late majority of users, it begins to compete with the established product in its traditional market. Christensen⁴⁸ concludes that disruptive technologies may enter and expand emerging market niches, in improving with time and ultimately attacking established products in their traditional markets. 	<ol style="list-style-type: none"> 1. <i>First, distinction between sustaining and disruptive technologies.</i> 2. <i>Second, the move of products/services to the higher segment of the market creates opportunities for disruptive technologies to “attack from below” and conquer the lower segment of the market. For Christensen, it’s easier to target potential consumers in the lower-end market</i> 3. <i>3. Third, as new technology improves it may drive the older products out of the market. Once the technological innovation reaches to majority of users, it begins to compete with the established product. Christensen⁶⁹ concludes that disruptive technologies may enter emerging market niches, improve with time and ultimately attack established products.</i> 	<p>め、訂正を認める。</p>
<p>Page 57, Line 8-19 MIT’s Utterback⁴⁹ adds the concept of “attack from above” and contends that by emphasizing only “attack from below”, Christensen ignores other patterns of technological innovation, which may be of equal or greater importance. Utterback describes digital cameras as an “attack from above”: a more expensive technology, and as a counter-example to Christensen’s theory. This is because of the higher cost and complexity of the digital camera relative to conventional photography, which, according to Christensen’s arguments, might exclude it from being a disruptive innovation. Whether or not it is seen as disruptive under Christensen’s model, digital photography is for Utterback⁵⁰ undoubtedly innovative and has disrupted the photographic industry. Utterback⁵¹ concludes that cases of “attack from below” might have greater potential for explosive growth than do those of “attack from above”, but in either pattern it can be observed as instances of dramatic technological innovation.</p>	<p>Page 52, Line 1-11 MIT’s Utterback⁷⁰ complements the concept of “attack from above” in addition to “attack from below”, which may be of equal or more important. Utterback has presented examples of both higher performing and higher priced innovation introduced into highest market segments and later moves down towards the lower mass market. Utterback describes digital cameras as an “attack from above”, a more expensive technology, and as a counter-example to Christensen’s “attack from below”. For Utterback, because of the higher cost and technical complexity of the digital camera, Christensen might exclude it from being a disruptive innovation⁷¹. Digital photography for Utterback⁷² has disrupted the photographic industry who concludes that cases of “attack from above” can be observed as instances of disruptive technological innovation.</p>	<p>参考文献を明示して冗長な表現を削除したため、訂正を認める。</p>
<p>Page 57, Line 20-26 Cooper and Schendel⁵², in contrast as well to Christensen’s theory, present the above to below-market progression of a number of</p>	<p>削除</p>	<p>冗長な記述の削除と認められる</p>

<p>disruptive products including the ball-point pen, which was originally more expensive than the fountain pen. Continued development resulted in the “throw away” pen, which opened up new market segments. Here, Utterback and Cooper & Schendel have presented examples in which a higher performing and higher priced innovation is introduced into leading established market segments and later moves towards the mass market.</p>		<p>ため、訂正を認める。</p>
<p>Page 58, Line 4 - Page 59, Line 16 “Attack from below” study case: Japan reaching the technological frontier, from the Christensen disruptive innovation theory perspective⁵³ As Christensen considers that Japan reached the technological frontier, he also gives his perspective on Japan’s technological achievements and standoff from his disruptive innovation theory perspective: The booming Japanese economy from the 1960s through the mid-1980s was one of the most thoroughly studied and admired phenomena of modern times. Since then, Japan, in contrast, has been mired in stagnation that appears to have no end, also named the “macro-economic puzzle”. For Christensen, the answer lies primarily at the managerial and microeconomic parallel: why many companies considered the best in the world fell so quickly? For Christensen, their innovations fell victim to levels and with a phenomenon he termed as "disruptive technologies as all of the technologies that drove Japan's economic growth through the 1960s and 1970s were disruptive technology." Christensen states that disruption, is not only a core microeconomic driver of macroeconomic growth, but also has played a fundamental role in economy. For him, once the microeconomic roots of disruptive technology are understood, policymakers can learn how to transform relatively stagnant economies such as Japan's. For Christensen, Japan's macroeconomic puzzle has a microeconomic parallel: why did so many companies that were once considered the best run in the world stumble so quickly? The answer is that their innovations fell victim to disruptive technologies. Nearly all of the technologies that drove Japan's stunning economic growth through the 1960s and 1970s were disruptive relative to the dominant American and European manufacturers. • Christensen illustrates the case of Toyota: “Toyota who attacked the lowest tiers of the North American automobile market in the</p>	<p>Page 52, Line 15 - Page 53, Line 6 “Attack from below” study case: Japan reaching the technological frontier, from the Christensen disruptive innovation theory perspective⁷³ As Christensen considers that Japan reached the technological frontier, he also gives his perspective on Japan’s technological achievements and standoff from his disruptive innovation theory perspective: The booming Japanese economy sustained from the 1960s through the mid-1980s. Since then, Japan has been stalled in stagnation named the “macro-economic puzzle”. For Christensen, Japan's macroeconomic puzzle has a microeconomic parallel: why many companies considered the best in the world fell so quickly? For Christensen, their innovations fell victim to disruptive technologies as all of the technologies that drove Japan's economic growth through the 1960s and 1970s were disruptive • Christensen illustrates the case of Toyota: “<i>Toyota attacked the lowest tiers of the North American automobile market in the 1960s with its Corona model. The cars were simple and reliable that they became second cars. Toyota encountered competition from other Japanese companies such as Nissan and Honda. To maintain its profit margins, Toyota then introduced models targeted at more demanding consumers. Honda and Nissan have followed Toyota. Now, these car makers are stuck at the high end of their own markets⁷⁴”.</i> Based on Christensen’s theory, disruptive technologies set their own trap: Japanese firms are now stuck at the high segment of the markets.</p>	<p>参考文献を明示して冗長な表現を削除したため、訂正を認める。</p>

<p>1960s with its Corona model. The cars were so simple and ultimately so reliable that they became second cars in the garages of middle-income Americans. This track worked until Toyota encountered competition in this tier from other Japanese companies such as Nissan, Honda, and Honda Mazda. To maintain its profit margins, Toyota then introduced models targeted at more demanding consumers. Honda and Nissan have followed Toyota in this upmarket march. From the small manufacturers of the cheap Japanese imports of the 1960s, these firms have grown into huge global corporations.</p> <ul style="list-style-type: none"> • Sony is another mentioned example. Between 1950 and 1979, it introduced significant disruptive technologies, including pocket radios, portable televisions, consumer video cameras, and the Walkman. But since 1979, Sony has not created a single new growth market of this genre. Even though it now offers technologically innovative products such as its Playstation and the Vaio line of notebook computers, they are sustaining innovations, not market-creating disruptive ones. <p>Over and over again, Japanese companies succeeded with this approach. But based on Christensen's theory, disruptive technologies also set their own trap. These very firms are now stuck at the high end of their own markets. Their best customers are now the most sophisticated and demanding ones.</p>		
<p>Page 59, Line 20-28</p> <ul style="list-style-type: none"> • Advanced Driving Assistance: technologies and related applications for automated systems to improve the performance of the vehicle and the driver to make driving safer • Emergency: technologies and related applications to respond to accidents and other emergencies such as dispatch of ambulances • Traveler Information: technologies and related applications to support traveler decision-making before and during a trip • Traffic and Demand Management: technologies and related applications to manage traffic flow to reduce traffic demand on roads and congestion 	<p>Page 53, Line 10-17</p> <ul style="list-style-type: none"> • Advanced Driving Assistance: technologies and related applications to make driving safer • Emergency: technologies and related applications to respond to accidents and emergencies • Traveler Information: traveler decision-making technologies and related applications before/during trip • Traffic and Demand Management: technologies and related applications to manage traffic congestion 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 60, Line 8-9 For information, ITS services have been standardized by ISO/TC204/WG1⁵⁴ which defined a set of fundamental services (safety-related services are in bold):</p>	<p>Page 53, Line 25-27 For information, ITS services have been standardized by ISO/TC204/WG1⁷⁵ which defined a set of fundamental services⁷⁶. 10 out of the 32 are safety-related services (in bold):</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 61, Line 11 32. Safety Enhancement for Vulnerable Road Users</p>	<p>Page 54, Line 31 32. Safety Enhancement for Vulnerable Road Users</p>	<p>Bold への書体変</p>

		更であり、ケアレスミスの修正のため、訂正を認める。
<p>Page 61, Line 15-28</p> <ul style="list-style-type: none"> • Safety technologies and related applications Examples of such technologies and related applications are curve speed warning, collision warning, adaptive cruise control, stability control, traction control, lane departure warning, forward and rear collision avoidance, intersection collision avoidance and lane departure prevention. These technologies focuses on enhancing driving conditions by providing safety and emergency applications, navigation and traffic information, and location based applications. Safety and emergency services technologies include emergency crash notification. • Vehicle centric technologies and related applications Examples of these technologies and applications are diagnostic/prognostic applications such as low-tire pressure or fluid-level warnings, and engine monitoring. These types of solutions aimed at for service and maintenance monitoring^{xii}. 	<p>Page 55, Line 4-10</p> <ul style="list-style-type: none"> • Safety technologies and related applications These technologies focuses on enhancing driving conditions by providing safety and emergency applications, navigation and traffic information, and location based applications. Safety and emergency services technologies include emergency crash notification. • Vehicle centric technologies and related applications These types of solutions aimed at for service and maintenance monitoring^{xi}. 	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 62, Line 6-8</p> <p>Disruptive technological advances in telecommunications and sensors have made possible the development of a large number of ITS services such as navigation assistance, remote monitoring, preventive maintenance, and traffic control.</p>	<p>Page 55, Line 16-18</p> <p>Disruptive technological advances in telecommunications and sensors have made possible the development of a large number of ITS services such as navigation assistance, remote monitoring, preventive maintenance, and traffic control⁷⁷.</p>	参考文献を明示したため、訂正を認める。
<p>Page 62, Line 8-11</p> <p>All these services are primarily directed towards the key requirements of safety of the occupants of the vehicle. ITS safety technologies are the main focus of the chapter for at least following reasons:</p>	<p>Page 55, Line 18-21</p> <p>All these services are primarily directed towards the key requirements of safety of the occupants of the vehicle. ITS safety technologies are the main focus of the chapter for at least following reasons⁷⁸:</p>	参考文献を明示したため、訂正を認める。
<p>Page 62, Line 24 - Page 63, Line 5</p> <p>ITS can shift helping the paradigm from helping occupants survive a crash to helping the driver avoid the crash in the first place. Pre-crash safety systems can help drivers avoid hazardous mistakes by minimizing distraction and providing warnings or control in imminent crash situations. Making driving safer requires pre-crash safety systems with electronic devices whose reflexes are quicker than people's and which can compensate for at least some driver errors. The advantage of these systems is that they can warn the</p>	<p>Page 56, Line 8-9</p> <p>ITS aimed at not only assisting passengers survive a crash but also to aiding the driver avoid the crash itself. Crash avoidance technologies can be classified as</p>	冗長な表現をなくした修正のため、訂正を認める。

<p>driver of potential dangers. Crash avoidance systems can be divided into different categories:</p>		
<p>Page 63, Line 10 - Page 64, Line 7 In-vehicle safety technologies are on-board systems which can be classified as follows: -Sensors-based systems Sensors-based systems monitor lane departure and irregular movements of the vehicle. These include sensors that monitor the lane markers on the road, monitor weaving of the vehicle and warn the driver. As the vehicle's position relative to the lane markers is continuously monitored, when the vehicle strays too close to the lane markers, the system exerts a small torque in the opposite direction that the driver can feel through the steering wheel, and continued deviation produces, e.g., an audible warning. -Vision enhancement systems The vehicle-based technologies provide, for a better visibility, an obstacle detecting sensor system for collision avoidance and/or an on-board night vision system: -sensors for the detection of pedestrian/obstacle -night vision systems for visibility enhancement. In-vehicle vision enhancement systems augment the information in the forward field of view and provide this information to the driver. Vision enhancement systems enhance visual input, the most important information that the driver needs in order to understand and manage the road environment. Reduced visibility is an important element accounting for a large part of all traffic collisions. Reduced visibility may be caused by illumination (glare, artificial light, etc.) and weather conditions (setting sun, dust, darkness, rain, sleet, snow, fog, etc.). -Sleepiness detection systems Many people continue to drive even when they are tired and fighting to stay awake. In-vehicle systems such as eye-closure monitors and devices that detect steering variance are aimed to address sleepiness. Some of these devices alert drivers when indications of sleepiness appear.</p>	<p>Page 56, Line 14-22 In-vehicle safety technologies are on-board systems which can be classified as follows: -Sensors-based systems Sensors-based systems monitor lane departure and irregular movements of the vehicle. -Vision enhancement systems The vehicle-based technologies provide, for a better visibility, an obstacle detecting sensor system for collision avoidance and/or an on-board night vision system: -sensors for the detection of pedestrian/obstacle -night vision systems for visibility enhancement.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 64, Line 9 - Page 65, Line 11 This type of safety systems deals with areas that are beyond the range of vehicle-based systems^{xiii} by utilizing <i>both</i>^{xiv} infrastructure-based and vehicle-based systems with wireless communication links between them. The advantage of these systems is that information is</p>	<p>Page 57, Line 1-13 This type of safety systems deals with both^{xii} road-based and vehicle-based technologies connected by wireless telecommunication. The advantage of these technologies is that data is received from the road (e.g. speed limits, traffic and road</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>received from the infrastructure (e.g. speed limits, traffic and road conditions) and provided dynamically at the appropriate time to individual vehicles. Information can also be transmitted in the opposite direction, <i>i.e.</i> from vehicle to infrastructure, for example to notify automatically emergency services when a vehicle has crashed. The use of infrastructure-vehicle systems to provide safety information adds the benefit of making it possible to determine whether an oncoming vehicle poses the danger of a head-on crash. Infrastructure-based crash avoidance systems use infrastructure sensors, processors and warning devices, infrastructure-vehicle communication devices, other infrastructure informational or warning devices and traffic signals to provide driving assistance to vehicle drivers. The infrastructure-based technologies are implemented through infrastructure specific safety alerts to passing vehicles in order to:</p> <ul style="list-style-type: none"> -detect crashes -provide infrastructure specific safety alerts near pedestrian crossings; and -monitor pedestrian crossings and improve pedestrian visibility <p>Forward danger warning technologies</p> <p>One application of crash avoidance technologies is to provide safety information by detecting incoming vehicles in curves that are outside driver's field of vision. This is achieved through wireless communication between the infrastructure and the vehicle.</p> <p>Intersection crash avoidance technologies</p> <p>Intersection crash avoidance technologies warn drivers of potential crashes by monitoring a vehicle's speed and position relative to the intersection, along with the speed and position of other vehicles in the vicinity and by advising the driver of appropriate actions to avoid crash.</p> <p>Technologies sense the position and motion of other vehicles at intersections and determine whether they are slowing, turning, or violating traffic control devices.</p>	<p>conditions) and communicated appropriately to vehicles. Data is also communicated in the reverse direction, <i>i.e.</i> from vehicle to road, example e.g. to notify emergency services of crash collision. The use of road-vehicle technologies enhances anticipation of oncoming vehicle endanger a head-on crash. Road-based crash avoidance technologies use road sensors, road-vehicle communication, other road warning and traffic signals technologies to provide driving support drivers. The road-based technologies are carried out through road safety alerts to passing vehicles in order to:</p> <ul style="list-style-type: none"> -detect crashes -provide infrastructure specific safety alerts near pedestrian crossings; and -monitor pedestrian crossings and improve pedestrian visibility 	
<p>Page 64, Footnote ^{xiii} defined as telematics systems</p>	<p>削除</p>	<p>該当する本文がなくなったため、訂正を認める。</p>
<p>Page 65, Line 12 - Page 66, Line 10 3.2.1.3 Infrastructure-based technologies, Intelligent Cruise</p>	<p>Page 57 /Line 14-21 3.2.1.3 Infrastructure-based technologies</p>	<p>冗長な表現をなくした修正で、</p>

<p>Control technologies</p> <p>Intelligent cruise control provides support for drivers in judging driving conditions through combined use of infrastructure and information communications via wireless communications between the vehicle and devices installed alongside infrastructure. Intelligent cruise control maintains a vehicle's speed while keeping a safe distance from the vehicle ahead. Intelligent cruise control technologies, marketed initially as a comfort technology, have important safety advantages: the automatic speed reduction capability could lead to decreasing crash risk or crash severity. They enable the pre-set cruise speed of a vehicle to be automatically reduced in order to maintain a minimum time or distance headway to the preceding vehicle.</p> <p>Intelligent cruise control technologies can also include both forward crash avoidance systems and lane departure systems. They are designed to avoid head-on, roadway departure, merging, overtaking, turning crashes, and angle crashes. As these intelligent technologies optimize speed, distance between vehicles, and will reduce considerably driver workload. Adaptive cruise control technologies provide various levels of assistance, from warnings in risky situations to intervening functions that adjust vehicle speed or position in the longitudinal and/or lateral direction. Technologies incorporate sensors to detect objects, as well as curve to ensure the vehicle ahead is in the same lane. Data from these components are processed and linked to the vehicle's engine management and braking systems.</p> <p>Drivers will be able to put the vehicle on "cruise" and leave the driving to computers, and sensors, communicating with the other vehicles and with the infrastructure. Ultimately, the system will prevent cars from straying from their lanes, or colliding with pedestrians or vehicles. These safety technologies now will warn drivers of dangerous situations, recommend actions, and even assume partial control of vehicles to avoid crashes. The sensing capabilities will be integrated as well to vehicles display systems.</p>	<p>Intelligent cruise control provides support for drivers to be able to put the vehicle on "cruise" and leave the driving to computers, and sensors, which would communicate with both other vehicles and road infrastructure. Ultimately, the system will prevent cars from straying from their lanes, or colliding with pedestrians or vehicles. Safety technologies are able to notify drivers of unsafe conditions, recommend actions, and take restricted driving control of vehicles to avoid crashes. The sensing capabilities will be integrated as well to vehicles display systems.</p>	<p>セクションタイトルもそれに合わせて適切に変更されているため、訂正を認める。</p>
<p>Page 66, Line 12-19</p> <p>Getting to the scene of a crash by emergency response teams as quickly as possible is critical to saving lives: the shorter the time to medical treatment, the greater is the likelihood of recovery. To speed the delivery of medical care, it must be possible for emergency medical services to:</p> <ol style="list-style-type: none"> 1. receive timely notice of the incident; 2. be efficiently routed to the scene and to the hospital; 	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>

3. be aware of and able to know the apparent nature and degree of the injuries to tailor the response ^{xv} .		
<p>Page 66, Footnote ^{xv}This third element is quite important in differentiating between crash technologies and pot-crash technologies. This difference will be investigated further in this chapter.</p>	削除	該当する本文がなくなったため、訂正を認める。
<p>Page 66, Line 20 - Page 67, Line 5 Deaths occur when the victim did not arrive at a hospital or at a trauma center, within the “Golden Hour⁵⁵”, referred by Emergency Medical Services (EMS) professionals to the first 60 minutes of care after a multiple trauma injury. The Golden Hour concept consists of the following time frames: (1) Time between crash occurrence and EMS Notification, also called the “Golden 10 minutes”⁵⁶ (2) Travel time to the crash scene by EMS, (3) On-scene EMS rescue time, (4) Transport time to a hospital or trauma center, (5) Emergency department resuscitation time. Time critical injuries are the polytrauma, brain trauma and internal trauma injuries: Trauma is a time-dependent injury. “The Golden Hour” of trauma care is a concept that emphasizes on time dependency.</p>	<p>Page 57, Line 23 - Page 58, Line 9 Deaths occur when the victim did not get emergency treatment at a hospital or at a trauma center, within the “Golden Hour⁷⁹”, referred by Emergency Medical Services (EMS) professionals to the “first 60 minutes of care” for a multiple trauma injury emergency treatment. The Golden Hour concept consists of the following time frames (www.nhtsa.dot.gov⁸⁰, www.comcare.org⁸¹): (1) <i>Time between crash and notification, also called the “Golden 10 minutes”</i>⁸² (2) <i>Travel time to the crash scene,</i> (3) <i>On-scene rescue time,</i> (4) <i>Transport time to a hospital or trauma center,</i> (5) <i>Emergency department resuscitation time.</i> “<i>The Golden Hour</i>” is a time dependency concept as polytrauma, brain trauma and internal trauma injuries are time-related injuries.</p>	参考文献を明示して冗長な表現を削除したため、訂正を認める。
<p>Page 67, Line 7 - Page 68, Line 2 Polytrauma injuries As stated by R.D. Stewart⁵⁷, in polytrauma, crash victims suffering multiple injuries, the first hour of care is crucial: the patient must come under restorative care during that first hour”. Thus, the shorter the time period in which the possible occurrence of a severe crash induced multiple traumas can be recognized, and the rapidity in which the correct EMS advanced life support team is dispatched, is likely to make the difference between a permanently disabling, or fatal brain injury, and a recoverable normal life. This type of care can best be administered in a suitable facility such as an emergency room or, even better, a dedicated trauma center. Thus, transport of the victim to such facility needs to be accomplished within this time frame. Brain trauma injuries The most disabling injury that produces the greatest degree of long-term morbidity and cost is the post-traumatic brain injury. For the US</p>	削除	冗長な記述の削除と認められるため、訂正を認める。

<p>Department of Transportation, “All neurological damage does not occur at the moment of impact (primary injury), but rather evolves over the ensuing minutes, hours, and days. This secondary brain injury can result in increased mortality and more disabling injuries⁵⁸.”</p> <p>Internal trauma injuries</p> <p>As the use of seat belts increased and more people are protected by air bags, injury patterns are changing and injuries became more difficult to recognize. Previously external injuries were an obvious indicator of crash severity and of the potential presence of internal injuries. However, the growing absence of external injuries among people protected by air bags and/or belts are now found to be misleading emergency medical care providers into missing internal injuries, sometimes with fatal consequences.</p>		
<p>Page 68, Line 4-8</p> <p>Getting emergency response teams as quickly as possible to the scene of a crash or other injury-producing incident is critical not only to saving lives but most importantly minimizing the consequences of injuries. To achieve this timely medical care, EMS must receive timely notice of the crash including its precise location and information for quickest routings to the scene (and to the hospital).</p>	削除	冗長な記述の削除と認められるため、訂正を認める。
<p>Page 68, Line 9-11</p> <p>By reducing the time between the occurrence of a crash and notification to an emergency responses center, crash notification systems can help emergency responders get to the scene.</p>	Page 58, Line 11-12 By decreasing the time period between crash and notification to medical center, crash notification systems provide assistance to emergency team to get to site.	内容の明確化の修正のため、訂正を認める。
<p>Page 68, Line 11 - Page 69, Line 3</p> <p>In many fatal crashes, the fatality occurs because of delay between the time the crash occurred and the time a call is placed (which in turn delays the arrival of medical treatment).</p> <p>Crash Notification Systems (CNS) automatically transmits voice and data to an emergency response center when the driver presses a button, or when triggered by the scene board safety equipment (such as an airbag or emergency tensioning safety belt). The Crash Notification System immediately opens a voice connection between the driver and the operator in the Crash Notification Systems call center. In-vehicle wireless voice connection to the vehicle's passengers enables calls. Crash victims; if able to speak, can immediately inform dispatchers about the number of victims and any apparent injuries sustained, giving emergency responders firsthand information about the crash prior to arriving at the scene. After conferring with the passengers, the operator can then notify</p>	削除	冗長な記述の削除と認められるため、訂正を認める。

<p>emergency responders about the incident, the apparent condition of the passengers, and the exact location of the crash. It will be enabling them to dispatch suitable resources to administer the appropriate level of care.</p> <p>Immediate access to real-time information enables EMS to react more quickly to an emergency situation. First, emergency responders are automatically notified of a crash, whether or not the victim is able to call for help. Second, they avoid inadequate location information. All too often in emergency situations, public safety dispatchers receive wireless calls alerting them to an emergency, but the caller often fails to provide accurate location information due to unfamiliarity with the area or to distraction caused by the crash's commotion.</p>		
<p>Page 69, Line 11-15</p> <p>Post-crash notification systems take the safety benefits of the crash notification systems to the next level by providing emergency responders with data that indicates the severity of the crash. In the event of a crash, an installed post-crash notification systems device automatically transmits, in real-time, crash data retrieved from in-vehicle sensors.</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 69, Line 17 - Page 70, Line 11</p> <p>In principle, emergency responders want as much crash data as possible about the severity of the crash. This data will allow a prediction of the severity of the injuries sustained and could make a more appropriate response, not just a faster one. If EMS can estimate the seriousness of the crash, number of people involved, and assess their injuries, it can make better decisions.</p> <p>PCNS provides metrics that can help critical decisions such as:</p> <ul style="list-style-type: none"> • The appropriate EMS unit required, basic or advanced life support Crash data helps emergency responders dispatch the right care such as advanced life support if the data predict severe injury. • The mobilization of specialized professionals PCNS data will let emergency medical technicians and hospital staff anticipate and prepare treatment for a victim, on site and in the hospital, immediately after a crash. EMS can assemble the appropriate trauma surgical team while the patient is in route, rather than waiting until the patient arrives. • The right medical facility, closest hospital or regional trauma center 	<p>Page 58, Line 21 - Page 59, Line 4</p> <p>PCNS provides metrics help critical decisions such as:</p> <ul style="list-style-type: none"> • The appropriate EMS unit required, basic or advanced If the crash data predict severe injury, it will help emergency services to send the appropriate advanced life care support. • The mobilization of specialized professionals PCNS data will let emergency staff in hospitals prepare appropriate course of action for injured, on crash site and in hospital. The right medical facility, closest hospital or regional trauma center. It helps doctors determine what kind of treatment may be needed, and which appropriate medical team. 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>The crash data could help doctors determine what kind of treatment may be needed, and enable them to ready an appropriate medical team. At a trauma center, the trauma teams will be able to better prepare to deliver optimal care for seriously injured crash victims which includes timely and accurate diagnoses, intensive critical care facilities and staff, readily available trauma teams with surgeons specializing in brain and spinal cord injuries, internal organ injuries, and orthopedic injuries.</p>		
<p>Page 70, Line 12 - Page 72, Line 6 Sensors technologies The post-crash notification systems combine information from vehicle crash sensors and local positioning technology, and transmit it to EMS via wireless technologies. The engineering issue is connecting that data source to the communications capability in the car. The post-crash notification systems use a series of strategically located crash sensors that collectively calculate accident's severity and analysis, captures, and relays data with a range of critical technical information. The system discerns between front, side and rear impacts and a broad range of data including near and complete air bag deployment, number of impacts, severity calculations and rollovers. Sensors are connected to vehicle networking architecture. A sensing module receives a full perspective of the crash from the crash sensors via the vehicle's electronic architecture. Sensors measure the number, magnitude, and direction of impact forces. Sensor's software technologies Software collects crash sensor measurements of accelerations, direction of crash forces, and crash configuration rating of crash severity. The software would: 1. measure metrics of the forces in all three dimensions during the crash event to know the magnitude of the crash impact. This determines the change in the vehicle's velocity upon impact changes throughout entire crash sequence. For example, it would be helpful to know whether a car has a single impact or has several impacts. 2. measure principal direction of force (frontal, sides, and rear). Probability of injury to the driver and passenger(s) varies greatly with the direction of force impacting a vehicle. A significant number of serious and fatal crashes do not involve front end collisions and therefore do not have air bag deployment.</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>

<p>3. estimate whether and how many times a vehicle has rolled over during a crash is an additional indicator of the severity of injuries.</p> <p>4. assess belt use. Transmitted information would indicate whether the driver was wearing a seat belt at the time of a crash.</p> <p>5. report whether additional seats in the car are occupied, and whether the occupants of those seats are belted, would have the added benefit of notifying emergency personnel. The number of victims is particularly important if no one in the car can speak.</p> <p>6. add sensors to provide data such as the number, size and seating positions of occupants, air bag time of deployment, level of air bag deployment, and deployment of seat belt emergency tensioning retractors, seat belt forces, door openings, presence or absence of fire, pre-crash speed, and braking deceleration.</p> <p>Successful and proper response to a crash will be based on complex injury prediction algorithm which will estimate the severity of the crash. Enriched crash notification data can move immediately and efficiently from an automobile crash in a format that is usable to emergency agencies and to the emergency physicians and trauma surgeons who will ultimately rely on this information.</p> <p>Advantages of the post-crash notification systems</p> <p>As mentioned above, the data emitted by the post-crash notification systems give responders further refining to respond and to administer the most appropriate and effective medical care. This is far more valuable than just localized indication that simply denotes that a crash occurred as in the crash notification systems.</p> <p>The safety value is very substantial for vehicles that produce car crashes data. The post-crash notification systems will allow the prediction of the probability of severe injury, and the probabilities of specific injuries. It would allow moving from simple knowledge of a crash, to a clear picture in real time of the severity of the crash. By enhancing the crash information that emergency and medical teams receive, the appropriate type of response assistance will be more efficient.</p>		
<p>Page 72, Line 7-16</p> <p>3.2.5 Conclusion</p> <p>Post-crash notification systems are a significant advancement in the field of vehicle safety technologies, brings in a new era in the use of vehicle and communications industry.</p> <p>Post-crash notification systems are the most advanced in-vehicle safety and security service. It responds to customer concerns for</p>	削除	冗長な記述の削除と認められるため、訂正を認める。

<p>enhanced vehicle safety and is supported by leading experts in the emergency and medical fields. Indeed, post-crash notification systems have broken new ground in the field of emergency and medical services through its ability to provide critical accident information and to help reduce the time between when a crash occurs and when comprehensive care is administered.</p>		
<p>Page 72, Line 23 1 Navigation Systems</p>	<p>Page Line 11 1 Navigation System</p>	<p>綴り修正のため、訂正を認める。</p>
<p>Page 73, Line 12 - Page 74, Line 16 3.3.1.1 Driving safety technologies (referred in Japan as ITS development area 3) As ITS plan in Japan set the national safety goal for 2025 as "a 50% reduction of traffic accident related deaths⁵⁹", Japan launched three in-vehicle sensor-based projects aimed at pre-crash safety measures to prevent accidents, as follows: 1) Smartway Project, also called Advanced Cruise-Assist Highway Systems (AHS) Project⁶⁰, is an infrastructure-based concept, which provides support for drivers in judging driving conditions through combined use of road infrastructure and telecommunications systems. AHS can help the driver to avoid obstacles ahead of the vehicle by controlling the vehicle's cruising via mobile communications between the vehicle and devices installed alongside roadways. In addition, the system can detect and report road traffic accidents and disasters automatically. AHS development stage is conceptualized into three phases: 1. AHS-<i>I</i> (Information): the system partially supports collection of information 2. AHS-<i>c</i> (Control): the system partially supports driving operation in addition to information collection 3. AHS-<i>a</i> (Advanced cruise): the system performs a full information collection and driving operations, and assumes some responsibility for safe driving systems. 2) ASV-Advanced Safety Vehicle (ASV) Project⁶¹ (or Smartcar/Smart Vehicle Project) aims at improved safety realized through in-vehicle sensor technologies. Research and development related to this project includes the following six major safety oriented technologies: i) preventive safety technologies, ii) accident avoidance technologies, iii) fully automatic steering technologies, iv)</p>	<p>Page 60, Line 1-8 3.3.1.1 Driving safety technologies (referred in Japan as ITS development area 3) As ITS plan in Japan set 2025 as "a 50% reduction of traffic accident related deaths⁸³", Japan launched three in-vehicle sensor-based projects aimed at pre-crash safety measures to prevent accidents, as follows: 1) Smartway Project, also called Advanced Cruise-Assist Highway Systems (AHS) Project⁸⁴ 2) ASV-Advanced Safety Vehicle (ASV) Project⁸⁵ (or Smartcar/Smart Vehicle Project) aims at improved safety realized through in-vehicle sensor technologies. 3) Smart Cruise System Project⁸⁶ aims at allowing drivers to put the car on "cruise".</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>technologies for improved safety in collisions, v) technologies for preventing expansion of damage and havoc, and vi) fundamental vehicle technologies.</p> <p>3) Smart Cruise System Project⁶² aims at allowing drivers to put the car on "cruise". Examples of Smart Cruise System applications are as follows:</p> <p>i) support for prevention of crashes with forward obstacles, to detect other vehicles and objects in the headway and to notify the vehicle.</p> <p>ii) support for prevention of turning crashes, to inform a vehicle of intersections where turnings are possible and to detect oncoming other vehicles and to notify the vehicle.</p> <p>iii) support for prevention of lane departure, to receive lateral direction information from lane markers installed in the infrastructure.</p>		
<p>Page 74, Line 24-27</p> <p>"Pedestrian ITS" refers mainly to the pedestrian versions of AHS. This program intends to apply AHS collision technologies developed for vehicle-to-vehicle (V2V), to vehicle-to-pedestrians, to avoid pedestrian/vehicle collisions (or at least to reduce severity to enhance overall pedestrian safety).</p>	<p>Page 60, Line 16-19</p> <p>"Pedestrian ITS" refers mainly to the pedestrian AHS, to apply AHS collision technologies developed for vehicle-to-vehicle (V2V), to vehicle-to-pedestrians, to avoid pedestrian/vehicle collisions (or at least to reduce severity to enhance overall pedestrian safety).</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 74, Line 28 - Page 75 Line 1</p> <p>Pedestrian ITS mainly consists of in-vehicle sensors to control the walking and transport environments to increase drivers awareness of the presence of pedestrians.</p>	<p>Page 60, Line 19-21</p> <p>Pedestrian ITS mainly consists of in-vehicle sensors to control the walking and transport environments to increase driver awareness of the presence of pedestrians.</p>	<p>綴り修正のため、訂正を認める。</p>
<p>Page 75, Line 27 - Page 76, Line 8</p> <p>Helpnet⁶³ is a crash notification system developed in Japan intended to reduce collision notification delay. In many crash incidents, the fatality increases due to delay between the time of the collision and the time of an arrival of emergency medical services (EMS) crew at the site of the collision. The shortening of this delay can dramatically improve treatment. Helpnet, using mobile communications networks, reduces the delay in collision notification and response time, especially in cases where the driver and passengers become unconscious. When an airbag is deployed, a mobile voice channel opens automatically to notify operators at a Helpnet call center that a collision has taken place. Helpnet sends the location information of the accident by the use of the location information, transmitted to police and/or an ambulance service center, which can dispatch an ambulance quickly to the site of the accident.</p>	<p>Page 61, Line 19-27</p> <p>Helpnet⁸⁷ is a crash notification system developed in Japan intended to reduce collision notification delay. In many crash incidents, the fatality increases due to delay between the collision and the arrival of emergency medical services (EMS) crew at the site of the collision. The shortening of this delay can dramatically improve treatment. Helpnet, using mobile communications networks, reduces the delay in collision notification and response. When an airbag is deployed, it notifies operators at Helpnet that a collision took place. Helpnet sends accident location information by the use of the location-based data, transmitted to police and/or an ambulance service center, which can dispatch an ambulance quickly to the site of the accident.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

Chap IV Partnerships

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 77, Line 6-7 As an example, technological approach can help to prevent crashes and reduce the severity of crashes that occur.</p>	削除	冗長な記述の削除と認められるため、訂正を認める。
<p>Page 77, Line 7-9 ITS technologies are helping to shift the safety focus from minimizing the consequences of crashes to the use of technology to make crashes less severe and to prevent them.</p>	<p>Page 63, Line 6-8 ITS technologies are helping “to shift the safety focus from minimizing the consequences of crashes to the use of technology to make crashes less severe and to prevent them”⁸⁸.</p>	参考文献を示し、引用符を挿入して引用箇所を明確化したため、訂正を認める。
<p>Page 77, Line 15-22 The greatest obstacle to implementing ITS is not technological but institutional set of relationships components, knowing that resources to implement ITS are often aimed at the technology. ITS by its nature, involves actions taken by a number of different stakeholders. Therefore, enhancing the enabling impact of ITS will require the interplay of complementary components, coordinated action among diverse stakeholders and an inclusive policy to benefit from synergies. Implementation of ITS requires a new set of relationships among the key components of transportation: vehicles, infrastructure and communication networks providers.</p>	<p>Page 63, Line 16-20 The greatest obstacle to implementing ITS is not technological but institutional. ITS by essence involves engagements taken by different stakeholders. Therefore, ITS will require the integration of complementary parts, coordinated actions among stakeholders and a comprehensive policy to benefit all from proposed synergies. Implementation of ITS requires a new partnering among the key players of transportation value chain: vehicles, infrastructure and communication networks providers.</p>	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 77, Line 23 - Page 78 /Line 12 The institutional approach is based on partnerships: there are a large number of different ways partners can work together to integrate telecommunication with transportation such as Public-Private Partnership (PPP), Government-Industry-Academia partnership defined as National Innovation System (NIS) and others. Each of these different ways of partnering may be thought of as a partnership model – a particular way of interacting among different partners. The success of ITS is correlated to the partnership of multiple stakeholders in the design of policies and in their implementation where each partner has specific roles and responsibilities. Partnerships are required to aggregate the capabilities and resources to create win-win situations for the various partners involved.</p>	<p>Page 63, Line 21 - Page 64, Line 8 The institutional approach is based on partnerships: partners can work together to integrate telecommunication with transportation such as Public-Private Partnership (PPP), Government-Industry-Academia partnership defined as National Innovation System (NIS) and others. Each of these partnering process may be considered of as a partnership model – a specific way of interacting among different partners. The success of ITS is correlated to the partnership of multiple stakeholders in the design of policies and in their implementation where each partner has specific responsibilities. Partnerships sum up both capabilities and resources to generate win-win circumstances for these partners. A partnership’s taskforce aligns goals, incentives and responsibilities</p>	冗長な表現をなくした修正のため、訂正を認める。

<p>A partnership’s taskforce thus should work to align the goals, incentives, roles and responsibilities of diverse partners. The successful design and implementation of a policy focused on ITS requires the formation of nation-wide coordination involving all partners.</p>	<p>of the involved partners. The successful design and implementation of a policy focused on ITS requires the formation of nation-wide coordination involving all partners.</p>	
<p>Page 78, Line 14-24 For Nelson⁶⁴, the rationale of the developmental state is to implement selective industrial policies, accompanied by public and related government initiatives in carrying out strategic investment. Chang⁶⁵ states that the developmental state is key in coordinating industrial investment and in providing a developmental vision through institution-building in support of private sector and managing or resolving conflicts among interest groups. For White and Wade⁶⁶, the developmental state is considered as a historical animator for economic change, framed by the ideology of “developmentalism” as a national project for industrialization. An emphasis on the national specificity of development strategies belongs to the theoretical foundations of both the theory of the developmental state and the National Innovation Systems (NIS) approach.</p>	<p>Page 64, Line 10-18 For Nelson⁸⁹, the developmental state implement industrial policies, accompanied by public sector initiatives in carrying out industrial investment. Chang⁹⁰ states that the developmental state is key in coordinating industrial investment and in providing a developmental mission in support of the private sector by managing diverse interest groups. For White and Wade⁹¹, the developmental state is considered as a traditional agent for economic change, outlined by the thought of “developmentalism” as a national project for industrialization. National development strategies have its place in the fundamentals of the developmental state as well as the National Innovation Systems (NIS) theories.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 78, Line 27 - Page 79, Line 5 For Odagiri and Goto⁶⁷, the technological frontier implies no more imitation but entrepreneurial activities, as new and uncertain economic areas are explored. Lall⁶⁸ goes further by stating that in approaching the technological frontier, the articulation, intensity and content of entrepreneurial effort become decisive, knowledge- and science-intensive, building on established capabilities. The state has a major role to play in the stimulation and coordination of technological capabilities within institutional frameworks.</p>	<p>Page 64, Line 21-26 For Odagiri and Goto⁹², the technological frontier implies no more imitation but entrepreneurial activities beyond it, as new and risky business areas are considered. Lall⁹³ goes further by stating that in approaching the technological frontier, the entrepreneurial effort become significant, knowledge- and science-demanding, building on innovative competencies, with the government has a foremost part to play in the organization of industrial capabilities.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 79, Line 6-24 For Amsden⁶⁹, the rationale of industrial policy, in the context of industrial maturing, shifts from resource mobilization in support of industrialization to the building of science and technology infrastructures, yet with the role of government as a stimulating and facilitating factor. National Innovation System (NIS), shortly defined as Government-Industry-Academia partnership for technological innovation, addresses the policy impact on technological trajectories and developmental opportunities – involving the restructuring of (technological) innovation systems whose institutional networks co-evolve with the transition from developmental state to entrepreneurial</p>	<p>Page 64, Line 27 - Page 65, Line 13 For Amsden⁹⁴, the logic of innovation policy, in the context of industrial maturing, changes from resource mobilization in support of industrialization to the erection of science and technology infrastructures, yet with the role of state as a motivating and enabling actor. National Innovation System (NIS), shortly defined as Government-Industry-Academia partnership for technological innovation aimed at the technological and developmental policy–involving the technological innovation systems which evolve from developmental state to entrepreneurial state⁹⁵. Wade⁹⁶ sees national systems of innovation driven by government as the initiator of</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>state⁷⁰. Wade⁷¹ sees national systems of innovation driven by government as the initiator of entrepreneurship. Schumpeter⁷² emphasized that innovation resulted from entrepreneurial activities could be incited by an appropriate institutional environment. The latter would include government involvement in the promotion of entrepreneurial behavior among economic agents: “this behavior may be molded also by the specific action of other social organs, governments for instance”. For Schumpeter⁷³, innovation needs to be forced upon the majority of economic agents, as progress in general is basically a result of force and confrontation. Entrepreneurial leadership by nature breaks the inertia of traditions and routines, by gaining the acceptance of consumers. For Schumpeter⁷⁴, leadership constitutes the decisive component of entrepreneurship.</p>	<p>entrepreneurship. Schumpeter⁹⁷ emphasized that innovation resulted from entrepreneurial activities through institutional environment which would include government in promoting of entrepreneurial activities among economic players. For Schumpeter⁹⁸, innovation is required from these economic players, as innovation process in general is “basically a result of force and confrontation”. Entrepreneurial leadership by nature breaks the inertia of traditions and routines, by gaining the acceptance of consumers. For Schumpeter⁹⁹, leadership constitutes the decisive component of entrepreneurship.</p>	
<p>Page 79, Line 26-29 Schumpeter⁷⁵'s perspective on government agencies as entrepreneurial agents might be illustrated as an articulation of the entrepreneurial function by organs of the state which would point to an entrepreneurial intervention in certain industries by setting up enterprises that could proceed with the introduction of innovations.</p>	<p>Page 65, Line 15-18 Schumpeter¹⁰⁰'s perspective on government as entrepreneurial agent might be as well expression of the entrepreneurial function by organs of the state which involves an entrepreneurial intervention in certain existing or new industries by setting up businesses that could introduce innovations.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 80, Line 2-8 For Schumpeter, the institutional dynamism of the entrepreneurial state reflects the evolution of state. For Weiss⁷⁶, the mode of governance implies a ‘catalytic state’ cooperating with the private sector in order to support technological innovation. For Ebner⁷⁷, when the exercise of governmental entrepreneurship is combined with innovations, it characterizes the rationale of an entrepreneurial state, based on coordination between private and public sector that shape the entrepreneurial efforts in generating and absorbing new technology.</p>	<p>Page 65, Line 20-25 For Weiss¹⁰¹, the mode of governance implies a ‘catalytic state’ cooperating with the private sector in order to support technological innovation. For Ebner¹⁰², public sector entrepreneurial activities are combined with innovations, it illustrates the validation of an entrepreneurial state, based on synchronization between private and public sector that outline the entrepreneurial activities in generating and absorbing new technologies¹⁰³.</p>	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 80, Line 9-14 For opportunities to be realized, creation of public-private partnership is needed: common objectives, program plans and joint long-term commitments need to be developed. Public-private partnerships bring the strengths of each sector together for the benefit of both: each sector does the part of the work it is best at. There are shared interests between government and industry that can only be achieved if there is appropriate partnership.</p>	<p>Page 65, Line 26-27 Public-Private Partnerships (PPP) take along the assets of each sector together for the advantage of both: each ensures the work it is best at.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 80, Line 17-18 The contracts are featured by public control over private contractee, while privatization is defined as the private control by the market.</p>	<p>Page 66, Line 3-4 Contractual arrangements are highlighted by public sector control over private contractee,</p>	<p>冗長な表現をなくした修正</p>

		のため、訂正を認める。
<p>Page 81, Line 5-14</p> <p>In contractual arrangements, a public agency contracts an outside private party, contractor, for a fee in exchange for its services. The public sector retains control: the public agency, as a purchaser of privately owned resources, has authority to control and monitor its private contractee as well as to direct them to comply with legal requirements and policy directions. The advantages of the traditional contracts are that roles and responsibilities are defined by legally bound relationships.</p> <p>The public sector is not as flexible in agreements because of legal and regulatory requirements. In contrast, i.e. if businesses once enter the market, they may leave it on their own judgment on profitability rather than on accountability to the public as it happens in the public sphere.</p>	<p>Page 67, Line 3-7</p> <p>In contracts, a public sector agent contracts a private sector agent, contractor, for a charge in exchange of pretested services. The public sector retains control: the public agent, as purchaser, has control its private agent contractee as well as enforce legal and policy requirements. The advantages of the contracts are that responsibilities are legally defined.</p>	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 82, Line 3-19</p> <p>For IMF⁷⁸, PPPs (in infrastructure) refer to arrangements where the private sector supplies infrastructure assets and services that traditionally have been provided by the government. In addition to private execution and financing of public investment, there is service provision, as well as investment, by the private sector. Significant risk is transferred from the government to the private sector.</p> <p>Public/private partnerships in transport refer to non-traditional relationships between the public and the private sectors, where “non-traditional” means contractor-contractee relationships. In partnerships, parties accept shared risks, shared responsibilities, resources sharing and shared benefits. Two sectors put a certain amount of resources (including financial ones). The partnership makes it possible to complete what no one entity could do on its own. In public-private partnership, approaches and strategies may be (re)negotiated depending upon each sector’s goals and perspectives. VICS project illustrated the Japanese PPP model related to ITS. In ITS, the public sector relies on private sector in resources, expertise and experience, and the private sector depends on the public sector in the policies and funds that will help their investment in projects or their efforts to expand a market share.</p>	<p>Page 67, Line 10-20</p> <p>Public/private partnerships in transport refer to institutional collaboration between public and private sectors, as contractor-contractee collaboration. In partnerships, parties accept shared risks, shared responsibilities, resources sharing and shared benefits. Two sectors put a certain amount of resources (including financial ones). The partnership aimed at achieving what no one party could do by itself. In public-private partnership, collaborations are (re)negotiated depending upon each sector’s interests. VICS project illustrated the Japanese PPP model related to ITS.</p> <p>In ITS, the public sector expects from the private sector expertise and experience as well as financial/technological resources. The private sector on the other hand requests public policies and public financial support which would increase participation in public projects or create business opportunities.</p>	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 84, Line 2-6</p> <p>Public agencies might enter in a PPP in order to develop a project which will come back under the control of the public sector.</p>	<p>Page 69, Line 1-8</p> <p>Public agencies might enter in a PPP in order to develop a project which will come back under the control of the public sector. For the</p>	参考文献を示し、引用符を

<p>Traditional strategies for the deployment of transportation infrastructure have often taken this trend. One common model for public-private cooperation in infrastructure development is called BOT (Build-Operate-Transfer). In this model, private companies invest in the construction of infrastructure and, with public sector support, own and operate the infrastructure and collect tolls or usage fees. Once the return of investment is made, the facility is transferred to the public sector for continuing operation.</p>	<p>World Bank (www.worldbank.org) “traditional strategies for the deployment of transportation infrastructure have often taken this trend. One common model for public-private cooperation in infrastructure development is called BOT (Build-Operate-Transfer). In this model, private companies invest in the construction of infrastructure and, with public sector support, own and operate the infrastructure and collect tolls or usage fees. Once the return of investment is made, the facility is transferred to the public sector for continuing operation”¹⁰⁵.</p>	<p>挿入して引用箇所を明確化したため、訂正を認める。</p>
<p>Page 85, Line 2-8 For the U.S. Department of Transport⁸⁰ (DOT), a public-private partnership refers to “an arrangement of roles and relationships in which two or more public and private entities coordinate/combine complementary resources to achieve their separate objectives through joint pursuit of one or more common objectives.” Much of what the public sector does in relation to ITS technologies i.e. in Japan can have a direct and sometimes profound effect on industry. From this standpoint, partnerships are essential to the long-term success of ITS technological deployment.</p>	<p>Page 70, Line 2-3 For the U.S. Department of Transport¹⁰⁶ (DOT), PPP is an arrangement in which public and private organizations coordinate/combine assets to reach own objectives.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 85, Line 10-12 There are a set of reasons why public-private partnerships would be the main organizational arrangement in carrying out ITS projects, which will be illustrated by a VICS study case in next chapter, such as follows:</p>	<p>Page 70, Line 5-7 There are a set of reasons why public-private sectors partnerships would be the foremost structural arrangement in running ITS projects, which will be illustrated by a VICS study case in next chapter, such as follows:</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 85, Line 14-26 The private sector is generally better at introducing technological innovation and reacting swiftly to rapidly changing technology environments. It is said that private sector has further capabilities in marketing new technologies and related products (than does the public sector) by supplementing the lack of resources, expertise, and experience that the public sector would need at carrying out ITS activities. For public sector, it might be economical to enter into a partnership with the private sector The rapid evolution of transportation/telecom related technologies gives the private sector greater flexibility in selecting and incorporating technologies quicker and effectively. It is argued that the private sector has more experiences in developing and marketing new technologies and products than does the public sector. It is expected that the private sector could supplement the lack of resources, expertise, and experience that the public sector would</p>	<p>Page 70, Line 9-17 Not only the private sector, in rapidly changing technology environments, is most appropriate at introducing technological innovation but has better capabilities in marketing these technological innovation and related products/services by enhancing the financial/technological resources and expertise that the public sector could requisite at carrying out ITS activities. For public sector, it might be economical to enter into a partnership with the private sector. As each responsibility would be stated in partnership agreements, contracts might be negotiable under changing conditions to facilitate services and products delivery promptly.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>need at implementation phases. For public sector, it might find it much more cost-effective to enter into a partnership with the private sector.</p> <p>Although it is necessary to define roles and responsibilities through partnership agreements, approaches might be flexible and negotiable under changing circumstances to enable services and products delivery on time under rapid changes in technology.</p>		
<p>Page 86, Line 2-19</p> <p>A possible partnership model assumes that the cost of initial infrastructure deployment and initial applications will be supported by the government possibly or/with cost-sharing from a private network services provider contractor in return for access to infrastructure components.</p> <p>The public sector value proposition involves providing the initial communications network in order to obtain the significant future advantages from the private sector that cannot be obtained through infrastructure improvements alone.</p> <p>The industry value proposition involves a commitment to roll out in-vehicle devices on a given schedule in return for a public sector commitment to supply the infrastructure necessary to support a national market for the range of services that the in-vehicle devices may support that, in turn, justifies the industry investment.</p> <p>Transport infrastructure, which the public sector takes charge of, is set up and maintained by the public sector. Products and services related to vehicles are taken care of by the private sector, which actually produces and sells such units. This approach is employed by VICS in Japan^{xvii}.</p> <p>Simply stating, each sector does the part of the work it is best: the public sector focuses on the infrastructure part of the work, and the private sector focuses on the vehicle part.</p>	<p>Page 70, Line 19 - Page 71, Line 3</p> <p>A possible partnership model assumes public sector bear the cost of infrastructure with initial applications to be supported cost-sharing from the private sector in exchange for infrastructure access.</p> <ul style="list-style-type: none"> • The public sector proposition would deliver the telecommunications network in order to achieve upcoming advantages from the private sector that cannot be obtained through infrastructure improvements alone. • The industry proposition would roll out in-vehicle devices in exchange for public sector commitment to national infrastructure and market for in-vehicle services and devices justifying the industry investment. <p>As transport infrastructure is set up by the public sector, related in-vehicles products and services are produced and sold by the private sector. This approach is employed by VICS in Japan^{xiv}.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 86, Line 21-25</p> <p>Conducting research and development is risky for private companies when commercialization is uncertain. For this reason, the public sector should support and coordinate research projects between private firms. The public sector, by creating common research platforms, different companies can develop individual applications using the results of the research and development.</p>	<p>Page 71, Line 5-7</p> <p>R&D is risky for private companies when commercialization is uncertain. For this reason, the public sector should support and coordinate research projects between private firms.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 86, Line 27 - Page 87, Line 9</p> <p>Usually, industry has limited ability to carry out large partnership tasks and little incentive or interest in introducing systems that appear</p>	<p>Page 71, Line 9-14</p> <p>Usually, industry has partial capability, little incentive or interest in introducing products/services that appear to have no commercial</p>	<p>冗長な表現をなくした修正</p>

<p>to have no commercial demand. On the other hand, capital resources and expertise required are often outside beyond the capacity of the public sector. An emerging industry like ITS may be perceived as costly and risky. Therefore, governments might encourage participation of private businesses to enter the ITS industry, especially in areas where private sector ITS applications can help achieve societal goals such as safety and congestion alleviations^{xviii}. Some of the risks involved in developing new ITS systems can easily be taken by the private sector and some of the risks can more easily be handled by the public sector. By public-private partnerships, both the public and private sectors can generate benefits specific to their own strengths through risk sharing.</p>	<p>demand. On the other hand, necessary financial capital and technical know-how expertise are often outside the scope of the public sector. Therefore, governments might encourage private sector to move in the ITS industry, particularly when private sector ITS applications can achieve societal objectives such as safety and congestion improvements^{xv}.</p>	<p>のため、訂正を認める。</p>
<p>Page 87, Line 11-18 The prevailing economic environment is market competition. Competition imposes on firms to control their costs, to earn revenues in excess of costs, and to respond to threats. Public sector needs to rely on competition wherever possible to achieve the best possible outcome. However, sometimes public sector needs to protect its private partners from competition to ensure economic viability during the incubation and initial growth stages. Indeed, there may be circumstances when the public sector needs to avoid creating conditions of excessive competition for an ITS public-private partnership in the start-up phase.</p>	<p>Page 71, Line 16-19 Public sector needs private sector competition wherever possible to attain the best possible result. However, public sector needs to protect its private associates from competition to ensure business viability through incubation and initial growth for an ITS public-private partnership start-up period.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 87, Line 20-25 Small scale operations can be a major barrier to ITS, because manufacturers and service providers must operate in a range where production costs are high, and might exceed revenues. If public-private partnerships are to succeed, it should achieve economies of scale and operate where costs are sufficiently below revenues that the partnership is likely to earn a profit. Businesses that have strong economies of scale can lower costs.</p>	<p>Page 71, Line 21-22 If public-private partnerships are to succeed, it should realize economies of scale by running low costs necessarily below revenues in order to generate profit.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 88, Line 2-10 The public and private partners through a set of interactions create the services for the private sector principal customer base, which is also the same public sector's base: vehicle drivers and passengers. The private sector is more suitable to respond quickly to new ITS product and service demands, and to tailor products and services to different segments of the market. It is also better to have sales handled by the private sector in order to induce competition. Public sector needs to help accelerate deployment by encouraging and</p>	<p>Page 72, Line 1-7 The public and private partners through a set of interactions create the services for the private sector customer segment, which is also the same public sector's citizen segment: drivers and passengers. The private sector is more apt to adapt swiftly to ITS product/service arising needs, and to fit products/services to different customers segments. Public sector would support effective sale and use of private ITS products and services, offering market incentives and eliminating obstacles that hold back private sector involvement.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>endorsing the sale of ITS products and services, providing market incentives and removing barriers that slow down private sector involvement.</p>		
<p>Page 88, Line 13-16 The private sector could contribute and participate actively in ITS development and expansion by partnering with public sector in the development or delivery of transportation services. Many important ITS applications such as follows can appropriately be implemented by the private sector:</p>	<p>Page 72, Line 10-12 The private sector could contribute and participate actively in ITS development and expansion by partnering with public sector in developing ITS services. Essential ITS applications can be suitably driven by the private sector:</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 88, Line 21 - Page 89, Line 7 The private sector has to be fully convinced that the expected rate of return on investment is larger than the opportunity cost and that the project will earn a profit. The following are conditions necessary to attract private involvement:</p> <ul style="list-style-type: none"> • An economically viable ITS public-private partnership with a revenue stream for the private sector • Value of ITS services based on disruptive technologies exceeding the value offered by other traditional services based on disruptive technologies <p>In short, a private firm is examining where it can earn the best rate of return on its capital, given the risks involved: it will not invest in ITS unless the net earnings are expected to exceed the opportunity cost. Nevertheless, some of the returns-on-investments for the private sector, i.e. car makers, could be indirect through the ability to influence customer brand selection and reduce churn by using continuing service to maintain continued customer loyalty as well as to develop new sources of income^{xix}.</p>	<p>Page 72 /Line 17-23 The following are required to attract private contribution:</p> <ul style="list-style-type: none"> • A public-private ITS partnership with guaranteed revenue for the private sector • Value of ITS services based on disruptive technologies exceeding the value offered by other traditional services based on disruptive technologies <p>Some of the returns-on-investments for the private sector, i.e. car makers, could be indirect over branding and decreasing customer churn aimed at sustained customer loyalty as well as opportunities for new sources of revenues^{xvi}.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 89, Line 10-14 The main responsibility of the public sector is to look out for the public good to ensure that the transportation system serves effectively. Public sector's goal is to provide public good as widely and cheaply as possible. Public good for ITS can also be defined as an interest in pursuing technology within a NIS framework (see next section) and applying it to social and economic problems</p>	<p>Page 73, Line 2-4 Public sector's goal is to provide public good as widely and cheaply as possible. Public good for ITS can also be defined as an interest in pursuing technology within a NIS framework (see next section) and applying it to social and economic problems</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 89, Line 16-19 In contrast the objectives of private businesses aim at making profits and charging customers. Therefore, business interests are to expand existing markets and open new ones. In this way, the private sector might play a major role in developing and delivering ITS services and in providing access to users.</p>	<p>Page 73, Line 6-8 In contrast the objectives of private businesses aim at making profits and charging customers. Therefore, business interests are to expand existing markets and open new ones.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>Page 89, Line 21 - Page 90, Line 5</p> <p>The difference might turn into conflict between the public interest, aiming at good while and seeking profit. While the profit motive drives the private sector, profits can be realized in a context that is consistent with the public goal to assure access to services for all. Most private sector organizations recognize both the estimated economic opportunity the societal opportunity regarding ITS. Considering the estimated societal benefits that will be reached achieved through ITS deployment, and if the public sector can help advance public sector objectives for a safer and efficient transport infrastructure.</p> <p>Each purchase of ITS products or services, whether by users, businesses or public agencies, brings value to society, with benefits extending beyond the actual purchaser.</p>	<p>Page 73, Line 10-15</p> <p>As public sector focus on the public interest, private sector aimed at profit Still, profits can still be achieved with the public access to services for all. Societal benefits can be pursued through ITS utilization while the private sector achievement would support public sector goals for safer and efficient transport infrastructure. Each ITS products/services purchase adds value, benefiting the society, beyond the individual buyer”¹⁰⁷.</p>	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 90, Line 7-18</p> <p>Attract private sector capital and technology into both products and services</p> <p>The private sector should contribute and participate actively in ITS development and expansion by partnering with public sector in the development or delivery of transportation services.</p> <p>The public sector needs to make participation in building the ITS infrastructure, including the provision of appropriate technologies and related services, attractive to the private sector.</p> <p>Reduce public sector regulatory constraints and processes that pose unnecessary barriers</p> <p>After identifying potential markets for private sector participation, the public sector needs to consult with the private sector on barriers to participation – and then remove them.</p>	<p>Page 73, Line 17-19</p> <p>Public incentives attract “private sector capital and technology into both ITS products and services, and would effectively reduce public sector constraints that pose unnecessary barriers”¹⁰⁸</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 91, Line 9-11</p> <ul style="list-style-type: none"> • Beside the infrastructure dimension of ITS, the automotive industry is also involved in the vehicle dimension of ITS, such as navigation and pre-crash systems. 	<p>Page 74, Line 10-12</p> <ul style="list-style-type: none"> • Beside the public road infrastructure aspect of ITS, in the private vehicle aspect of ITS, the automobile industry is active in applications such as traffic navigation and pre-crash systems. 	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 92, Line 13 - Page 93, Line 2</p> <p>For Metcalfe⁸³, NIS is the “set of institutions that (jointly and individually) contribute to the development and diffusion of new technologies. These institutions provide the framework within which governments form and implement policies to influence the innovation process. As such, it is a system of interconnected institutions to create, store, and transfer the knowledge, skills, and artifacts which</p>	<p>Page 76, Line 3-7</p> <p>For Metcalfe, NIS is the “set of institutions that (jointly and individually) contribute to the development and diffusion of new technologies. These institutions provide the framework within which governments form and implement policies to influence the innovation process¹¹¹”. As such, it is a system of interconnected institutions to create, store, and transfer the knowledge, skills, and</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を</p>

define new technologies.	artifacts which define new technologies ¹¹² .	認める。
<p>Page 93, Line 3-5 Another definition for NIS by Niosi, Saviotti, Bellon, and Crow⁸⁴ is the following: the system of interacting government agencies, private and public firms and universities aiming at the production of science and technology within national borders.</p>	<p>Page 76, Line 8-10 Another definition for NIS by Niosi, Saviotti, Bellon, and Crow¹¹³ is the following: “the system of interacting government agencies, private and public firms and universities aiming at the production of science and technology within national borders.”</p>	引用符を挿入して引用箇所を明確化したため、訂正を認める。
<p>Page 93, Line 6-29 For Goto⁸⁵, NIS essentially consists of three sectors: industry, universities and the government with each sector interacting with the others, while at the same time playing its unique role in pursuing research & development (R&D). The objective of industrial R&D is to search for products, and to develop the accompanying processes by which these products can be manufactured. Its scope is, therefore, dictated by the needs of the market, whereas universities are more focused on basic research and on educating scientists and technicians. Government, on the other hand, conducts research related to such missions as national security and advances in medical science. For Goto⁸⁶, university is the key player in the national innovation system. Universities have had an important role in innovation by helping the private sector to introduce advanced technology, and by educating engineers and scientists. In this context, Goto underlines three important roles which universities perform in a national innovation system:</p> <ul style="list-style-type: none"> • First, they educate engineers and researchers and send them to industry and academia. • Secondly, universities are responsible for producing the so-called 'seeds' of innovation. Behind the logic of industry utilizing the basic research undertaken at universities lays the idea of the linear model of innovation. By this is meant that innovation is realized in three stages: basic research, applied research, and development. • Third role of universities in the process of innovation is that they are the repositories of advanced knowledge, which is of use to companies that are in search of solutions to their technological problems. 	<p>Page 76, Line 11-23 For Goto¹¹⁴, NIS essentially consists of three sectors: industry, universities and the government with each sector interacting with the others, while at the same time playing its unique role in pursuing research & development (R&D). The industrial R&D scope is dictated by the requirements of the market. For Goto¹¹⁵, university is the key player in the national innovation system with a vital role in innovation by aiding the private sector to introduce applications. In this context, Goto underlines three roles which universities carry out in a NIS:</p> <ul style="list-style-type: none"> • <i>First, they educate engineers and researchers for industry and academia.</i> • <i>Secondly, universities aimed at being center of innovation within the framework of the linear model of innovation through three stages: basic research, applied research, and development.</i> • <i>Thirdly, universities are the repositories of advanced technological knowledge, useful to companies in search of solutions to their technological problems.</i> 	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 94, Line 2-3 Additionally to PPP's goal related to ITS, building infrastructures such as transport and telecommunications could be aimed at</p>	<p>Page 77, Line 25-26 Additionally, to PPP's goal related to ITS, building infrastructures such as transport and telecommunications could be aimed at</p>	軽微なエディトリアル修正のため、訂正

stimulating technological learning. ⁸⁷	stimulating technological learning. ¹¹⁶	を認める。
<p>Page 94, Line 18-25</p> <p>Every stage of an infrastructure project, from planning and design through construction and operation, involves the application of a wide range of technologies and institutional and management arrangements. Because infrastructure facilities and services are complex physical, organizational, and institutional systems, deep understanding and adequate capabilities are required on the part of engineers, managers, government officials, and others involved in these projects⁹³. The concepts of national innovation systems and interactive relationships stress the links between firms, educational and research institutes, and governments.</p>	<p>Page 77, Line 14-20</p> <p>Every stage of an infrastructure project involves the deployment of an extensive technological, institutional and managerial arrangements. Because infrastructure systems are complex - physical, organizational, and institutional systems- comprehensive understanding and suitable abilities are required on the part of all parties involved in these projects¹²²</p> <p>The concepts of national innovation systems emphasis the complex relations between Industry, Academia and Government.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 95, Line 2-14</p> <p>Innovation is not just technological but also applies to public, business and organizational models. One of the important roles of partnership is to foster technological innovation. The partnership between government, industry and academia provides a ground for technological innovation by:</p> <ul style="list-style-type: none"> • conducting research, as directed by public and industry priorities, and disseminate the results; and • facilitating the translation of research results into both public policy and business implementation. <p>The public, private, and academic sectors each have their own strengths in doing research related to ITS, which can be mutually reinforced through partnership:</p> <ul style="list-style-type: none"> • The public sector contributes by undertaking the basic parts of ITS research and coordinate joint research efforts by private-academic entities; • The role played by the private sector is important in the implementation of ITS, from research and development to commercialization; • Academic institutions might assume the responsibility for putting their expertise into full use, if financially supported either by public or private funds, in research and development as well as training of human resources. <p>ITS is a field that requires continuous development of technologies. The public, private, and academic sectors each have their own strengths in doing research, which can be mutually reinforced through cooperation. ITS-related research activities touch many domain: technical (e.g. software, automatics, telecommunications) as</p>	<p>Page 77 /Line 20-21</p> <p>One of the important roles of partnership is to foster technological innovation.</p> <p>The public, private, and academic sectors each have their own strengths in doing research, which can be mutually reinforced through cooperation¹²³. ITS-related research activities touch many areas: technological (e.g. software, automatics, telecommunications) as well as business (market research) and social (benefits research)¹²⁴. These researches are crucial for development and successful ITS implementation.</p>	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>

<p>well as economical (market studies) and sociological (costs/benefits studies). Researches are indispensable to the development and implementation of ITS.</p>		
<p>Page 97, Line 8-10 Since 1995, date when the Prime Minister decided to coordinate ITS policy, the relevant ministries related to ITS (MLIT/MOT and MOC, MIC/MPT, METI/MITI and NPA) have met within the so-called “Four^{xx} Ministry Liason Conference”.</p>	<p>Page 79, Line 9-11 Since 1995, date when the Prime Minister decided to coordinate ITS policy, the relevant ministries related to ITS (MLIT/MOT and MOC, MIC/MPT, METI/MITI and NPA) have met within the so-called “Four^{xvii} Ministry Liaison Conference”.</p>	<p>綴り修正のため、訂正を認める。</p>
<p>Page 97, Line 24-25 2. Highway Industry Development Organisation (HIDO) coordinates, evaluate and researches ITS activities related to the road infrastructure such as ETC.</p>	<p>Page 80, Line 1-2 2. Highway Industry Development Organization (HIDO) coordinates, evaluate and researches ITS activities related to the road infrastructure such as ETC.</p>	<p>綴り修正のため、訂正を認める。</p>
<p>Page 98, Line 10-13 7. National Institute of Information and Communication Technology (NICT), a NIS type organization, supports national ICT policies by providing technological advice, cooperation with Industry and Academia, and researches into communication network technologies.</p>	<p>Page 80, Line 12-15 7. National Institute of Information and Communication Technology (NICT), a NIS type organization, supports ICT policies with technology-related guidance, cooperation with Industry, Academia, and researches into communication network technologies.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 98, Line 23</p> <ul style="list-style-type: none"> • that individual private sector can not undertake by themselves and 	<p>Page 80, Line 25</p> <ul style="list-style-type: none"> • that individual private sector cannot undertake by themselves and 	<p>綴り修正のため、訂正を認める。</p>
<p>Page 98, Line 26 - Page 99, Line 3 11. Information-technology Promotion Agency (IPA), as NEDO, invests in fields where private companies cannot develop the required technology due to the following reasons:</p> <ul style="list-style-type: none"> • private sector cannot do it alone • technology is too premature that no one yet can recognize how to turn it into business • multi-disciplinary approach, cooperation and research 	<p>Page 80, Line 28 - Page 81, Line 2 11. Information-technology Promotion Agency (IPA), as NEDO, invests in fields that individual private sector cannot undertake by themselves:</p> <ul style="list-style-type: none"> • where technology is not yet viable as a business • multi-disciplinary approach, cooperation and research 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 99, Line 12-21 As the Prime Minister Office is in charge of laying the foundations for ITS policy development, a separate ITS budget within each ministry is linked to the national ITS policies. Although the research done is based on the government’s policy goals, targeted investments that support ITS research are issued through semi-public agencies. For example, METI enforces its ICT R&D budget both directly and through semi-governmental organizations such as NEDO and IPA. At the end of each fiscal year (March), a report is issued on the results. What is highly interesting is the “entrepreneurial state” criteria used</p>	<p>Page 81, Line 10-16 As the Prime Minister Office is in charge of laying the foundations for ITS policy development, a separate ITS budget within each ministry is linked to the national ITS policies. Although the research done is based on the government’s policy goals, targeted investments that support ITS research are issued through semi-public agencies. What is highly interesting is the “entrepreneurial state” criteria used by some of the semi-public organizations.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

by some of the semi-public organizations.		
<p>Page 99, Line 22 - Page 100, Line 3 NEDO finances research into telecommunication</p> <ul style="list-style-type: none"> • that individual private sector cannot undertake by themselves and • which related to “high risk” technologies, including commercialization development support. <p>IPA, as NEDO, invests in fields where private companies cannot develop the required technology due to the following reasons:</p> <ul style="list-style-type: none"> • private sector cannot do it alone. • technology is too premature that no one yet can recognize how to turn it into business. • multi-disciplinary cooperative approach. 	<p>Page 81, Line 17-24 NEDO finances research into telecommunication</p> <ul style="list-style-type: none"> • that individual private sector cannot undertake by themselves and • which related to “high risk” technologies, including commercialization development support. • Information-technology Promotion Agency (IPA), as NEDO, invests in fields that individual private sector cannot undertake by themselves: • where technology is not yet viable as a business • multi-disciplinary approach, cooperation and research 	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 100, Line 8-9 The council has a secretariat consisting of about 100 people from the government, industry and academia.</p>	削除	冗長な記述の削除と認められるため、訂正を認める。
<p>Page 100, Line 12-13 In the FY2008 (April 2008-March 2009), budgets allocation for S&T-related programs/projects have been proceeded.</p>	<p>Page 82, Line 6-7 In the FY2008 (April 2008-March 2009), allocation of programs/projects budgets for S&T have been proceeded.</p>	明確な表現への修正のため、訂正を認める。
<p>Page 100, Line 15-21</p> <ul style="list-style-type: none"> • 92 new programs/projects whose budgets are over Yen 100 million per program/project and rated them as S (6 excellent), A (33 very good), B (43 good), and C (10 to be reviewed). • 174 continuing programs/projects whose budgets are over Yen 1 billion per program/project, and commented whether they are (1) to be accelerated (14 programs/projects); (2) to be promoted (155 programs/projects) and (3) to be decelerated (5 programs/projects). 	<p>Page 82 /Line 9-11</p> <ul style="list-style-type: none"> • 92 new programs/projects whose budgets are over Yen 100 million per program/project and rated them as S (6 excellent), A (33 very good), B (43 good), and C (10 to be reviewed)¹²⁸. • 174 continuing programs/projects whose budgets are over Yen 1 billion per program/project, and commented whether they are (1) to be accelerated (14 programs/projects); (2) to be promoted (155 programs/projects) and (3) to be decelerated (5 programs/projects).¹²⁹ 	参考文献を明示したため、訂正を認める。
<p>Page 100, Line 27 Examples of ICT projects are as follow</p>	<p>Page 82, Line 21 Examples of ICT projects¹³² are as follow:</p>	参考文献を明示したため、訂正を認める。
<p>Page 101, Line 6</p> <ul style="list-style-type: none"> • Technologies of display, storage, ultra high speed device 	<p>Page 82, Line 28</p> <ul style="list-style-type: none"> • Technologies of display, storage, ultra-high speed device 	軽微なエディトリアル修正のため、訂正を認める。

<p>Page 101, Line 20-24</p> <ul style="list-style-type: none"> The "e-Japan Priority Policy Program" (2001) positioned placed the private sector as the driving force; the role of government is to create establish an environment where the private sector can employ exert its full capacity potential. It also mentioned the establishment of an environment where the private sector, based market forces, can exert its full potential and make Japan the world's most advanced nation IT nation within five years. 	<p>Page 83, Line 13-15</p> <ul style="list-style-type: none"> The "e-Japan Priority Policy Program" (2001) considered the private sector as the driving force while the public sector has to support the private sector on contributing to make Japan the most advanced ICT country. 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 102, Line 4-6</p> <ul style="list-style-type: none"> System Architecture for ITS in Japan (1999), released by the five governmental bodies concerned with ITS, set goals for public-industry-academia collaboration for each of the ITS R&D areas and their related user services. 	<p>Page 83, Line 21-23</p> <ul style="list-style-type: none"> System Architecture for ITS in Japan (1999), released by the five governmental bodies concerned with ITS, set goals for public-industry-academia partnership for ITS R&D focuses and their related user services. 	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 102, Line 15-16</p> <p>The proclaimed goal was to establish Japan as an advanced science and technology oriented nation.</p>	<p>Page 84, Line 6-7</p> <p>The proclaimed goal was to establish Japan as an advanced science and technology oriented nation¹³⁵.</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 102, Line 18-20</p> <p>The office considered the success of ITS largely depending on how the partnership proceeded among all involved parties.</p>	<p>Page 84, Line 9-10</p> <p>The office considered the success of ITS depending on partnership among all involved parties.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 102, Line 23 - Page 103, Line 2</p> <p>It is understood in this NIS context that universities and research institutes, through mainly public funds, conduct basic research and basic technological development from a mid-term governmental perspective, and industry pursuing process innovation and product innovation that anticipates consumer needs. In this connection the strengthening of ties between universities, which are considered the birthplace of technological knowledge, and the industrial sector, which applies and commercializes that technological knowledge is especially seen crucial to bolster Japan's international competitiveness.</p>	<p>Page 84, Line 13-20</p> <p>For Nippon Keidanren, it is understood in this NIS context that universities and research institutes, through mainly public funds, conduct basic research and basic technological development from a mid-term governmental perspective, and industry pursuing process innovation and product innovation that anticipates consumer needs¹³⁴. In this connection the strengthening of ties between universities, which are considered the birthplace of technological knowledge, and the industrial sector, which applies and commercializes that technological knowledge is especially seen crucial to bolster Japan's international competitiveness¹³⁵.</p>	<p>参考文献を明示し、引用が明確になるように修正したため、訂正を認める。</p>
<p>Page 103, Line 4-11</p> <p>While industry played a vital role in the development and improvement of road safety (see below projects), government set the framework by:</p> <ul style="list-style-type: none"> supporting the development of ITS-related safety requirements; developing programs to provide incentives to encourage deployment of ITS safety-oriented products and services; 	<p>Page 84, Line 22 - Page 85, Line 3</p> <p>While industry played a dynamic role in developing and improving road safety (see below projects), government set the framework by:</p> <ul style="list-style-type: none"> supporting the development of ITS-related safety requirements; developing plans to offer incentives for deployment of ITS safety-oriented products/services; providing the necessary subsidy for ITS safety applications 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<ul style="list-style-type: none"> • providing the funding necessary for ITS research and deployment for safety-based applications, mainly pre-crash ones; • seeking opportunities to deploy ITS technologies. 	<p>research and deployment, mainly pre-crash ones;</p> <ul style="list-style-type: none"> • seeking opportunities to deploy ITS technologies. 	
<p>Page 103, Line 12 - Page 104, Line 6 Partnership for pre-crash safety technological projects: 1) Example of PPP project, initiated by MOC: Advanced Cruise-Assist Highway Systems (AHS) In 1989, the Ministry of Construction launched research and development for AHS (Automated Highway System was renamed in 1993 to Advanced Cruise-Assist Highway System). Research and development have been promoted jointly with the AHS Research Association, formed by 21 enterprises. 2) Example of NIS project initiated by MOT: Advanced Safety Vehicle (ASV) In 1991, ASV project was launched to incorporate advanced technologies for greater safety in vehicles. The ASV Promotion Study Group, set up jointly by MOT, experts, academics, and automobile manufacturers conducted the project. Research scope has been expanded to include trucks, buses and motorcycles, so the number of participating automobile manufacturers increased from nine to thirteen. 3) Example of public-public, MOC-MOT^{xxii}, partnership project: Smart cruise Project The Smart Cruise project has been jointly developed by MOC which has been promoting R&D on AHS, and MOT, which has been promoting R&D on ASV. The project aims ultimately at automated driving, to assist drivers in avoiding accidents. MOT and MOC began a proving tests program called "Smart Cruise 21".</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 104, Line 19-24 Public sector stakeholders need to seek ways to reduce administrative and bureaucratic decision making process. To aggravate the situation, this inflexibility creates some kind of sectionalism across ministries and public agencies which impedes intra-public sector cooperation. Public stakeholders often view each other as competitors rather than interdependent cooperators collaborators who may contribute to each other and together to common goals.</p>	<p>Page 85, Line 15-19 Public sector stakeholders need to reduce bureaucratic decision making process. To aggravate the situation, this inflexibility creates some kind of sectionalism across ministries and public agencies which impedes intra-public sector cooperation. Public stakeholders often view each other as opponents rather than partners who may add to each other for common goals.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 104, Footnote ^{xxii}MOT and MOC have been integrated in a new ministry, MLIT, Ministry of Land Infrastructure and Transport. The MOT's AHS project and the MOC's ASV project became respectively Smart</p>	<p>削除</p>	<p>該当する本文がなくなったため、訂正を</p>

Highway and Smart Vehicle projects within MLIT.		認める。
<p>Page 105, Line 7-9 By extrapolating the concept of “coopetition”, to compete and cooperate with the others at the same time, to the public agencies in an entrepreneurial state context, public agents in emerging innovation have to cooperate.</p>	<p>Page 86, Line 1-3 By extrapolating the concept of “coopetition”, to simultaneously compete and cooperate with the others to the public agencies in an entrepreneurial state context, public agents in emerging innovation have to cooperate.</p>	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 105, Line 20-23 Compared with public-private partnerships, partnerships between public agencies have constraints more constraints. Indeed, while businesses will not make initial arrangements for the projects where they do not see profits, initial partnering process between public agencies are often stimulated by political or other various external factors.</p>	<p>Page 86, Line 14-17 Compared with public-private sectors partnerships, public-public sectors partnerships have additional limitations. Indeed, while businesses will be not involved in partnership without expecting expect profits, public sectors partnering are mostly motivated by additional political factors.</p>	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 105, Line 24-27 Although the VICS partnership between public-private players was relatively smooth, there was some technological competition between these three public organizations regarding communication technologies to provide drivers with real time traffic information.</p>	<p>Page 86, Line 17-20 Although the VICS partnership between public-private players was relatively smooth, there was some technological competition between these three public organizations regarding communication technologies to provide drivers with real time traffic information¹³⁶.</p>	参考文献を明示したため、訂正を認める。
<p>Page 106, Line 5-19 Vehicle communication systems R&D activities had been conducted independently by</p> <ul style="list-style-type: none"> • National Police Agency (NPA), with Advanced Mobile Traffic Information and Communication System (AMTICS). The NPA system integrated the optical beacon function with optical traffic sensors not only for information provision, but also for information acquisition. Indeed, optical beacons have a two-way communication function used for on-demand Dynamic Route Guidance System (DRGS), part of Universal Traffic Management Systems (UTMS). • Ministry of Construction (MOC), with Road/Automobile Communication System (RACS). The MOC, responsible for road construction and traffic administration on motorways, intended to use radio beacons as a platform for extended services including, e.g., Electronic Toll Collection (ETC) system with Dedicated Short Range Communication (DSRC) which has also a two-way communication. • Ministry of Posts and Telecommunications (MPT), with FM multiplex broadcasting 	削除	冗長な記述の削除と認められるため、訂正を認める。
<p>Page 107, Line 7 what is further confusing it that ,</p>	<p>Page 87, Line 12 what is further confusing it that,</p>	軽微なエディ

		トリアル修正のため、訂正を認める。
Page 109, Line 11 with a infrastructure-based approach	Page 89, Line 14 with an infrastructure-based approach	軽微なエディトリアル修正のため、訂正を認める。
Page 110, Line 2-8 The US Congress formally mandated the creation of ITS America in 1991, to serve not only as a Federal Advisory Committee to the U.S. Department of Transportation (DOT), but also as a forum on ITS issues. ITS America ¹⁰⁴ , as a not-for-profit organization, includes “federal, state, local and foreign government agencies; national and international companies involved in the development of ITS; universities, independent research organizations, public interest groups, and any others with a stake in ITS.”	Page 90, Line 3-7 The US Congress assigned ITS America in 1991, to function as an US Federal Advisory body for the U.S. Department of Transportation (DOT) and as discussion platform on matters related to ITS. ITS America ¹⁴² , as a not-for-profit organization, consist of federal, state, local and other administrations; domestic and global corporations; universities, research institutions, interest groups, and others involved in ITS ¹⁴³ .”	参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。
Page 110, Line 13-25 U.S. Department of Transportation (DOT), US equivalent to the Japanese Ministry of Land, Infrastructure and Transport (MLIT), receives funds from US Congress and then provides funds, training and information to businesses, universities, and state and local governments. The U.S. DOT established ITS Joint Program Office (JPO) to coordinate and collaborate with different administrations^{xxiii} related to transport. At the federal level, ITS JPO is responsible for all ITS programs across U.S. DOT in planning, strategic directions and budgeting. The official objectives of the ITS JPO are to: (1) provide strategic leadership for ITS programs, (2) coordinate policy e.g. JPO agency establishes policy, manages the budget, and oversees programs. (3) fund and supervise basic research.	Page 90, Line 12-20 U.S. Department of Transportation (DOT), US equivalent to the Japanese Ministry of Land, Infrastructure and Transport (MLIT), receives funds from US Congress. The U.S. DOT established ITS Joint Program Office (JPO) to coordinate and collaborate with different administrations^{xix} related to transport. At the federal level, ITS JPO is in charge for planning, directions and budgeting of all ITS programs across U.S. DOT ITS JPO (1) lead ITS programs, (2) direct policies and programs. (3) fund and supervise basic research.	冗長な表現をなくした修正のため、訂正を認める。
Page 111, Line 2-8 Since the early history of the ITS program in the early 1990s, ITS America has acted as a formal advisory organization for U.S. DOT on ITS. ITS JPO asks as well members of ITS America for input in a particular issue. Most importantly, ITS JPO and ITS America jointly completed “The National ITS Plan” in 1995, the National ITS Program Plan	Page 91, Line 1-5 Since early 1990s, ITS America operated as an advisory body for the U.S. DOT on matters related to ITS where ITS JPO requests members of ITS America for involvement in ITS matter. ITS JPO and ITS America jointly worked on “The National ITS Plan” in 1995, the National ITS Program Plan in 2002 and the “9 New Initiatives” in 2004.	冗長な表現をなくした修正のため、訂正を認める。

<p>in 2002 and the “9 New Initiatives” in 2004.</p>		
<p>Page 111, Line 9-22 When compared to USA, the following observations can be stated: -Problems of dispersed authority in Japan: while ITS Joint Program Office (ITS JPO) is a primary coordination agency among public organizations in the U.S., Japan has no equivalent national agency that coordinates ITS-related public agencies. Instead, four-ministry liaison conferences are held jointly. -Although ITS Japan collaborates with the four public agencies/ministries to promote ITS deployment in Japan, but it is separated from them in structural, budget and decision making arrangement. -ITS Japan has no mandated role in policy-making. ITS Japan is not formally and actively associated to ITS policy in Japan although it might have a limited advisory role. -ITS America is a congressionally mandated Public-Private Partnership while ITS Japan is a private-academia partnership. - In ITS Japan, there is public sector institutions involved.</p>	<p>Page 91, Line 7-19 When compared to USA, the following observations can be stated: -Problems of dispersed authority in Japan: while ITS JPO acts as coordination agent among US public organizations, Japan has no corresponding national coordinator among ITS-related public agencies, only a 4 -ministry liaison conferences held conjointly. -Although ITS Japan collaborates with the four public agencies/ministries, it is separated in terms of structural, budget and decision making procedure. -ITS Japan has no mandated role in policy-making. ITS Japan is not formally and actively associated to ITS policy in Japan although it might have a limited advisory role. -while ITS America is a Public-Private Partnership, ITS Japan is a private-academia partnership. - In ITS Japan, there is public sector institutions involved.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 112, Line 20-21</p> <ul style="list-style-type: none"> follow up on the status of evaluation efforts by individual ministries and agencies related to ITS. 	<p>Page 92, Line 17</p> <ul style="list-style-type: none"> follow up on individual ministries and public agencies related to ITS. 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 113, Line 6-14 Indeed, when compared to USA, there is a problem of dispersed authority in Japan: while ITS Joint Program Office (ITS JPO) is a primary coordination agency among public organizations in the U.S., Japan has no equivalent entity that coordinates ITS-related agencies. Based on the US ITS Joint Program Office (JPO) model, a Japanese equivalent would do the following:</p> <ul style="list-style-type: none"> coordinate and collaborate with different public organizations related to transport, coordinate between different agencies of the government, research and academic institutions, and nongovernmental organizations, 	<p>Page 92, Line 25 - Page 93, Line 5 Indeed, when compared to USA, there is a problem of dispersed authority in Japan: while ITS JPO acts as coordination agent among US public organizations, Japan has no corresponding national coordinator among ITS-related public agencies Based on the US ITS JPO model, a Japanese equivalent would do the following:</p> <ul style="list-style-type: none"> coordinate and collaborate with different public organizations related to transport, bring together the multiple governmental, research, academic and nongovernmental organizations, 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 113, Line 23-27 Most importantly, ITS JPO can also provide a forum for all ITS public sector entities to resolve conflicts including the current organizational public sectionalism in ITS and advance mutual interests ideally, this ITS JPO should have authority and</p>	<p>Page 93, Line 14-18 Most importantly, ITS JPO can also provide a forum for all ITS public sector entities to resolve conflicts including the current organizational public sectionalism in ITS and advance mutual interests ideally, this ITS JPO should take the responsibility to</p>	<p>明確な表現への修正のため、訂正を認める。</p>

responsibility to make decisions and coordinate ITS efforts by all sectors of government.	coordinate ITS activities by all government-related organizations.	
Page 114, Line 9-10 <ul style="list-style-type: none"> ITS Japan recommends the use of schemes, systems and organizations that combine private-sector and public sector fundings 	Page 94, Line 2-3 <ul style="list-style-type: none"> ITS Japan recommends the use of schemes, systems and organizations that combine private-sector and public sector funding 	綴り修正のため、訂正を認める。
Page 114, Line 13-14 <ul style="list-style-type: none"> Promotion of collaboration and liaison between the public and private sectors Establishment of schemes and systems for the introduction of public-sector funds. 	削除	冗長な記述の削除と認められるため、訂正を認める。
Page 115, Line 2-4 <p>Although ITS Japan collaborates with the four public agencies to promote ITS deployment in Japan, it is separated from them in structural, financial and decision making arrangement when compared to ITS America.</p>	Page 94, Line 20-22 <p>Although ITS Japan cooperates with the four public agencies, it is disconnected from them for structural, financial and decision making arrangement when compared to ITS America.</p>	明確な表現への修正のため、訂正を認める。
Page 116, Line 4 <ul style="list-style-type: none"> advise all arms of the government on all ITS matters; 	Page 95, Line 21 <ul style="list-style-type: none"> give advice all governmental entities on ITS issues 	明確な表現への修正のため、訂正を認める。
Page 116, Line 10-12 <ul style="list-style-type: none"> provide strategic leadership for ITS programs, formulate policy, set goals and elaborate ITS strategies in Japan, including the targeting of particular areas and the setting of priorities. 	Page 95, Line 27 - Page 96 Line 2 <ul style="list-style-type: none"> be responsible for ITS programs leadership, devise policy, set objectives and elaborate ITS plans in Japan, aiming at specific areas including priorities. 	明確な表現への修正のため、訂正を認める。
Page 116, Line 16 <p>Such ministry might be</p>	Page 96, Line 6 <p>Such ministry might be</p>	綴り修正のため、訂正を認める。
Page 118, Line 4-20 <p>ITS will impact the relationship of roads, vehicles, and drivers, to achieve deployment of a number of key safety and information services that take advantage of telecommunication. The envisioned approach calls for private sector to install the technology in all new vehicles, to achieve safety and mobility benefits while, at the same time, public sector would focus on the roadside communications infrastructure e.g. in VICS. Indeed, in order to reap the benefits of ITS, it is necessary to involve the full range of actors in the public, private and academic sectors in a process that is inclusive, open and participatory. In the case of ITS, the relative success is correlated to</p>	Page 98, Line 8-21 <p>ITS will impact the relationship of roads, vehicles, and drivers, to achieve deployment of a number of key services such as safety and information enabled by telecommunication. The envisioned approach calls for private sector to install the technology in all new vehicles, to achieve safety and mobility benefits while, at the same time, public sector would focus on the roadside communications infrastructure e.g. in VICS. Indeed, in order to secure the benefits of ITS, public, private and academic sectors should be involved in an inclusive, open and participatory process. In the case of ITS, the relative success is correlated to the partnership for both policy and</p>	冗長な表現をなくした修正のため、訂正を認める。

<p>the partnership not only in the design of policy, but also, and more importantly, in their implementation—in such a way that each has specific roles and responsibilities. Partnerships are required to address the potential market failures and to create win-win situations for the various partners involved.</p> <p>The increase of ITS opportunity is leading to the creation of new products, services and distribution channels within traditional industries, as well as innovative “partnership-business models” and whole new industries. Neither the public sector nor the private sector alone as main partners would have achieved this objective: each is dependent on the partnership of others to accomplish its goals.</p>	<p>implementation and each has specific responsibilities. Partnerships are required to create win-win situations for all partners involved. ITS opportunities are leading to creation of new products/services within existing industries, for innovative “partnership-business models” and for entire new industries. Public sector or private sector alone cannot achieve goals: each is dependent on the partnership of others.</p>	
<p>Page 119, Line 5-6 Implementing ITS depends on building partnership within and between the public sectors at all levels.</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>

Chap V Ubiquitous Society

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 122, Line 9-11</p> <ul style="list-style-type: none"> The 1995 “ITS Guidelines” defined ITS as a driving force for “introducing information technology (IT) into the public sector,” indispensable for promoting creation of an advanced info-communications society”. 	<p>Page 102, Line 9-10</p> <ul style="list-style-type: none"> The 1995 “ITS Guidelines” defined ITS as a driving force for an advanced info-communications society”. 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 122, Footnote ^{xxvi}UNS is defined as infrastructure that can easily connect to networks that anyone can use at anytime from anywhere for any purpose and that has no digital divide</p>	<p>Page 102, Footnote UNS is defined as infrastructure that can easily connect to networks that anyone can use at anytime from anywhere for any purpose and that has no digital divide (http://japan.kantei.go.jp/policy/it/Program2006.pdf)</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 123, Line 4-6 In Japan, Intelligent Transport System (ITS) has been regarded, as analyzed in Chapter II, as a comprehensive info-telecommunications system dealing with transportation.</p>	<p>Page 103, Line 4-6 In Japan, Intelligent Transport System (ITS) has been regarded, as analyzed in Chapter II, as a comprehensive info-telecommunications system related to transportation.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 123, Line 8-14 The 1995 “Guidelines” defined ITS as a driving force for “introducing information technology (IT) into the public sector,” indispensable for promoting creation of an advanced info-communications society”. In 1999, the Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that ITS would be a major driving force for the Ubiquitous Society. One of the projects¹¹⁹ of u-Japan plan is ITS implementation.</p>	<p>Page 103, Line 8-12 The 1995 “Guidelines” defined ITS as a driving force for an advanced info-communications society”. For the Telecommunications Technology Council (TTC) mentioned in 1999 that ITS would be a key engine for the Ubiquitous Society. One of the projects¹⁵⁸ of u-Japan plan is ITS implementation.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 123, Line 18 - Page 124, Line 11 As Gore launched a National Information Infrastructure Initiative (NII) aiming at linking educational networks, research networks, medical networks and financial networks, Harvard’s Branscomb¹²⁰ argued that ITS is missing and ITS and NII should be integrated as well. As a result of analyzing 29 ITS user services, he observed that a significant component of ITS services may be provided through general-purpose communication infrastructure. He pointed out, “to date, ITS activity has occurred almost exclusively in the transportation domain”, with “no formal mechanism connecting ITS and the NII,” and “ITS has been largely absent in reports coming out of the Gore’s Information Infrastructure Task Force, the focal point</p>	<p>Page 103, Line 16 - Page 104, Line 5 As Gore initiated a “National Information Infrastructure” (NII) aiming at connecting educational, research, medical and financial networks, Harvard’s Branscomb¹⁵⁹ argued that ITS is missing and ITS and NII should be integrated as well. He pointed out that “to date, ITS activity has occurred almost exclusively in the transportation domain”, with “no formal mechanism connecting ITS and the NII,” and “ITS has been largely absent of the Gore’s Information Infrastructure Task Force”¹⁶⁰. Decade later, a link has been finally made between ITS and ICT in ITS America Vehicle Infrastructure Integration (VII) project. The goal of this Vehicle-Infrastructure Integration program (VII) is an</p>	<p>冗長な表現をなくし、引用が明確になるように修正したため、訂正を認める。</p>

<p>for federal coordination on NII activities”¹²¹. Decade later, a link has been finally made between ITS and ICT in ITS America Vehicle Infrastructure Integration (VII) project. The objective of this Vehicle-Infrastructure Integration program (VII) is to create an integrated, intercommunicating surface transportation system. The system is to use DSRC (Dedicated Short Range Communication) to link the road infrastructure with vehicles and their drivers. It will gather and share information to help improve the performance of the road infrastructure, vehicles, and drivers. The VII initiative defines its mission “to establish nationwide vehicle-vehicle and vehicle-infrastructure communication capability” and its primary goal to “deploy a communications infrastructure that supports both vehicle-infrastructure and vehicle-vehicle communications and enables a variety of innovative services”¹²².</p>	<p>integrated, surface transportation system using DSRC (Dedicated Short Range Communication) to connect the road infrastructure with vehicles to share information between road infrastructure, vehicles, and drivers. The U.S. Department of Transportation defines VII initiative mission as “to establish nationwide vehicle-vehicle and vehicle-infrastructure communication capability and its primary goal to deploy a communications infrastructure that supports both vehicle-infrastructure and vehicle-vehicle communications and enables a variety of innovative services”¹⁶¹.</p>	
<p>Page 124, Line 18-22 Additionally, to Japan (and Taiwan), Korea has placed a high priority on the establishment of the Ubiquitous Society. Korea announced in 2006, a new IT National Strategy called “u-IT839”. The term “839” comes from “8 Services”, “3 Infrastructures”, and “9 Growth Engines.”. Telematics, the ITS-based vehicle concept took a prominent position in such program.</p>	<p>Page 104, Line 12-16 Additionally, to Japan (and Taiwan), Korea has placed a high priority on the establishment of the Ubiquitous Society. Korea announced in 2006, a new IT National Strategy called “u-IT839”¹⁶². The term “839” comes from “8 Services”, “3 Infrastructures”, and “9 Growth Engines”¹⁶³.</p>	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 124, Line 23 The “8” main services are:</p>	<p>Page 104, Line 17 The “8” main services are¹⁶⁴:</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 125, Line 6 The “3” infrastructures are:</p>	<p>Page 104, Line 26 The “3” infrastructures are¹⁶⁵:</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 125, Line 10 The “9” growth engines are:</p>	<p>Page 104, Line 30 The “9” growth engines are¹⁶⁶:</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 126, Line 2-4 The concept of ubiquity reflects the trend where computing/communicating devices become increasingly invisible, intelligent, and deployed in a variety of settings such as the home, office and <i>vehicle</i>.</p>	<p>Page 105, Line 16-18 The concept of ubiquity describes the ICT development where devices become invisible or transparent, smart and installed in various location such as home, office and vehicle.</p>	<p>明確な表現への修正のため、訂正を認める。</p>

<p>Page 126, Line 8-10 As an example of “networked” environment, the vehicle in which traditional mechanical and systems are electronic, software-controlled and networked not only with each other but also with the outside environment.</p>	<p>Page 105, Line 21-24 As an example of “networked” environment, the vehicle in which traditional mechanical and systems are electronic and networked not only with each other but also with the external environment.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 126, Line 14-17 The aim of the technologies is to deploy and enable a communications infrastructure that supports vehicle-to-infrastructure, as well as vehicle-to-infrastructure-to-vehicle communications, for a variety of vehicle and transportation applications.</p>	<p>Page 105, Line 28-29 The purpose of these technologies is to support communications for both vehicle-to-infrastructure, and vehicle-to-infrastructure-to-vehicle applications.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 127, Line 19-21 In 2006, with regard to the traffic safety, a more realistic target of "reducing traffic fatalities to 5,000 or below by the end of 2012" is stated¹²⁵.</p>	<p>Page 107, Line 2-3 In 2006, with regard to the traffic safety, a more realistic target "reducing traffic fatalities to below 5,000 by 2012" is stated¹⁶⁹.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 127, Line 22 - Page 128, Line 4 <u>IT New Reform Strategy document</u> (excerpt and underlined by author) This document has two very important focuses: realizing the Ubiquitous Society and creating a safe society through the utilization of IT applications. Among the three categories of Priority IT policies, <i>the first category of policies is policies that seek the resolution by the use of IT of various problems confronting Japan such as measures designed to create a society in which people can live safely and securely:</i></p>	<p>Page 107, Line 4-11 <u>New IT Reform Strategy document</u> This document (http://japan.kantei.go.jp/policy/it/ITstrategy2006.pdf) has two very important focuses: realizing the Ubiquitous Society and creating a safe society through the utilization of IT applications. Among the three categories of Priority IT policies, <i>the first category of policies is policies that seek the resolution by the use of IT of various problems confronting Japan such as measures designed to create a society in which people can live safely and securely</i>¹⁷⁰:</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 128, Line 16-20 <i>By FY 2007, define the technology specifications necessary for rapidly sharing data on the location of traffic accidents with medical facilities including emergency response vehicles using cell phones and other means of communications, promote the introduction of systems by local governments and medical facilities, and promote the additional use of on-board equipment.</i></p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 128, Line 21-22 <u>Eighth Fundamental Traffic Safety Program FY2006 to FY2010</u> (excerpt and underlined by author)</p>	<p>Page 107, Line 22-23 <u>Eighth Fundamental Traffic Safety Program FY2006 to FY2010</u> (excerpt¹⁷¹ and underlined by author)</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 129, Line 1-4 <i>Basic Principles</i> • <i>We should aim to ultimately achieve a society with no traffic</i></p>	<p>Page 108, Line 3-6 <i>Basic Principles</i>¹⁷² • <i>We should aim to ultimately achieve a society with no traffic</i></p>	<p>参考文献を明示したため、</p>

<p>accidents</p> <ul style="list-style-type: none"> <i>We will follow the basic principle of people</i> <p>By:</p>	<p>accidents</p> <ul style="list-style-type: none"> <i>We will follow the basic principle of people</i> <p>By¹⁷³:</p>	<p>訂正を認める。</p>
<p>Page 129, Line 9-13</p> <p>Priority measures of the program comprise: (1) Road environment enhancements, (2) Implementation of the traffic safety initiative, (3) Promotion of safe driving, (4) Implementation of vehicle safety, (5) Preservation of order on the road, (6) Enhancement of rescue systems, (7) Improvement of liability security and victim support, and (8) enhancement of research, development, surveys, etc.</p>	<p>Page 108, Line 11-16</p> <p>Priority measures of the program (www8.cao.go.jp) comprise¹⁷⁴: (1) Road environment enhancements, (2) Implementation of the traffic safety initiative, (3) Promotion of safe driving, (4) Implementation of vehicle safety, (5) Preservation of order on the road, (6) Enhancement of rescue systems, (7) Improvement of liability security and victim support, and (8) enhancement of research, development, surveys, etc.</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 129, Line 17</p> <p>6th priority measure: to be taken enhancing rescue and emergency services systems</p>	<p>Page 108, Line 20-21</p> <p>6th priority measure: to be taken enhancing rescue and emergency services systems (www8.cao.go.jp)</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 129, Line 18 - Page 130, Line 13</p> <p>The government will improve rescue and emergency services systems and emergency medical care services by promoting closer liaison and cooperation with emergency-related organizations such as emergency medical facilities and firefighting organizations. The improved systems will be designed to deal with road traffic accidents, including accidents on national expressways, to save the lives of people injured in traffic accidents and to minimize the harm and damage caused by accidents. To further improve the life-saving rate and the effectiveness of life-saving treatment, the government will focus particular attention on providing emergency medical care and emergency treatment to injured people by doctors, nurses, emergency life-saving technicians or ambulance attendants, as soon as possible at emergency scenes and on the way to medical facilities. At the same time, they will promote improved reporting of emergencies from the scenes of traffic emergencies and provide more widespread training on bystander's first aid procedures.</p> <p>(1) Improving rescue and emergency services systems To rescue the injured as soon as possible and expedite accident processing in case of emergency, such as traffic accidents, the government will promote wide application of the Help system for Emergency Lifesaving and Public safety (HELP).</p> <p>(2) Improving emergency medical systems</p>	<p>Page 108, Line 22 - Page 109 /Line 5</p> <p>The government will improve rescue and emergency services systems and emergency medical care services by promoting closer liaison and cooperation with emergency-related organizations such as emergency medical facilities and firefighting organizations. The improved systems will be designed to deal with road traffic accidents, including accidents on national expressways, to save the lives of people injured in traffic accidents and to minimize the harm and damage caused by accidents.</p> <p>(1) Improving rescue and emergency services systems (2) Improving emergency medical systems (3) Cultivating the cooperation of emergency-related organizations</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>(3) Cultivating the cooperation of emergency-related organizations <i>To transport critically injured patients to emergency medical facilities quickly and smoothly, the government will promote closer communication and cooperation among related organizations, such as emergency medical facilities and firefighting organizations.</i></p>		
<p>Page 130, Line 15-24 From above two documents, the following specific statements are related to post-crash systems:</p> <ul style="list-style-type: none"> • <i>In the future, the prevention of traffic accidents will require collaboration between the various involved government agencies as well as the private sector</i> • <i>Reducing the annual number of any casualties to one million or less by 2010.</i> • <i>The government will improve rescue and emergency services systems and emergency medical care services by promoting closer liaison and cooperation with emergency-related organizations. The improved systems will be designed to deal with road traffic accidents to save the lives of people injured in traffic accidents and to minimize the harm and damage caused by accidents.</i> 	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 131, Line 7-13 The underlying concept of ITS is that safety of people and vehicle can be enhanced through the use of ITS-related technologies, both at the level of the vehicle and infrastructure. Already, in a document issued in 2003 “ITS Strategy in Japan”¹²⁷, in terms of safety and security, ITS Japan aimed at achieving a zone where traffic accident fatalities are reduced to zero. In 2006, with regard to the traffic safety, a more realistic target of "reducing traffic fatalities to 5,000 or below by the end of 2012" is stated¹²⁸.</p>	<p>Page 109, Line 18-23 The underlying concept of ITS is that safety of people and vehicle can be enhanced by ITS-related technologies, both at the level of the vehicle and infrastructure. Already, in a document issued in 2003 “ITS Strategy in Japan”¹⁷⁶, in terms of safety and security, ITS Japan aimed at achieving a zone where traffic accident fatalities are reduced to zero. In 2006, with regard to the traffic safety, a more realistic target of "reducing traffic fatalities to below 5,000 by 2012" is stated¹⁷⁷.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 131, Line 26-27 Indeed ITS in Japan has focused heavily on pre-crash safety measures in an attempt to significantly reduce fatalities.</p>	<p>Page 110, Line 9-10 Indeed, ITS in Japan has focused heavily on pre-crash safety measures in an attempt to significantly reduce fatalities.</p>	<p>軽微なエディトリアル修正のため、訂正を認める。</p>
<p>Page 132, Line 6-7</p> <ul style="list-style-type: none"> • Crash notification systems sends location information with GPS or wireless network location technologies, and open a voice link when a crash occurs, 	<p>Page 110, Line 18-19</p> <ul style="list-style-type: none"> • Crash notification systems send location information with GPS or wireless network location technologies, and open a voice link when a crash occurs, 	<p>綴り修正のため、訂正を認める。</p>

<p>Page 132, Line 10-14 Post-crash notification systems take the safety benefits of the crash notification systems to the next level by providing emergency responders with data that indicates the severity of the crash. In the event of a crash, an installed post-crash notification systems device automatically transmits, in real-time, crash data retrieved from in-vehicle sensors.</p>	<p>Page 110, Line 22-26 For ComCARE Alliance,” post-crash notification systems take the safety benefits of the crash notification systems to the next level by providing emergency responders with data that indicates the severity of the crash¹⁷⁹. In the event of a crash, an installed post-crash notification systems device automatically transmits, in real-time, crash data retrieved from in-vehicle sensors.”¹⁸⁰</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。</p>
<p>Page 132, Line 16 - Page 133, Line 3 Getting to the scene of a crash by emergency response teams as quickly as possible is critical to saving lives: the shorter the time to medical treatment, the greater is the likelihood of recovery. Deaths occur when the victim did not arrive at a hospital or at a trauma center, within the “Golden Hour¹³⁰”, referred by Emergency Medical Services (EMS) professionals to the first 60 minutes of care after a multiple trauma injury. The Golden Hour concept consists of the following time frames: (1) Time between crash occurrence and EMS Notification, also called the “Golden 10 minutes”¹³¹ (2) Travel time to the crash scene by EMS, (3) On-scene EMS rescue time, (4) Transport time to a hospital or trauma center, (5) Emergency department resuscitation time. Time critical injuries are the polytrauma, brain trauma and internal trauma injuries: Trauma is a time-dependent injury. “The Golden Hour” of trauma care is a concept that emphasizes on time dependency.</p>	<p>Page 111, Line 1-13 Deaths occur when the victim do not reach the emergency services, within the “Golden Hour¹⁸¹”, referred by Emergency Medical Services (EMS) professionals to the first 60 minutes of care after a multiple trauma injury. The Golden Hour time concept comprises the following time frames: (1) Time between crash incident and EMS report, also called the “Golden 10 minutes”¹⁸² (2) Arrival time to the crash by EMS, (3) On-site EMS rescue time, (4) Transport time to emergency center, (5) Emergency intensive care time. “The Golden Hour” is a concept that emphasizes the time dependency of trauma care. Trauma, as a time critical injury, might</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 133, Line 4-27 Polytrauma injuries As stated by R.D. Stewart¹³², in polytrauma, crash victims suffering multiple injuries, the first hour of care is crucial: the patient must come under restorative care during that first hour”. Brain trauma injuries The most disabling injury that produces the greatest degree of long-term morbidity and cost is the post-traumatic brain injury. For the US Department of Transportation, “All neurological damage does not occur at the moment of impact (primary injury), but rather evolves over the ensuing minutes, hours, and days. This secondary brain injury can result in increased mortality and more disabling injuries¹³³.”</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>

<p>Internal trauma injuries</p> <p>As the use of seat belts increased and more people are protected by air bags, injury patterns are changing and injuries became more difficult to recognize. Previously external injuries were an obvious indicator of crash severity and of the potential presence of internal injuries. However, the growing absence of external injuries among people protected by air bags and/or belts are now found to be misleading emergency medical care providers into missing internal injuries, sometimes with fatal consequences.</p>		
<p>Page 134, Line 2-6</p> <p>In principle, emergency responders want as much crash data as possible about the severity of the crash. This data will allow a prediction of the severity of the injuries and could make a more appropriate response, not just a faster one. If Emergency Medical Services (EMS) can estimate the seriousness, the number of people involved, and assess their injuries, it can make better decisions.</p>	<p>Page 111, Line 15-19</p> <p>In principle, emergency responders want as much crash severity data as possible, which would predict the severity of injuries and could make a more appropriate response, not just a faster one. If Emergency Medical Services (EMS) can estimate the injuries seriousness of the crash and know the number of people involved, it would certainly make better decisions¹⁸³.</p>	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 134, Line 7-23</p> <p>PCNS provides metrics that can help critical decisions such as:</p> <ul style="list-style-type: none"> • life support The appropriate EMS unit, basic or advanced life Crash data helps emergency responders dispatch the right care such as advanced life support if the data predict severe injury. • The mobilization of specialized professionals PCNS data will let emergency medical technicians and hospital staff anticipate and prepare treatment for a victim, on site and in the hospital, immediately after a crash. EMS can assemble the appropriate trauma surgical team while the patient is in route, rather than waiting until the patient arrives. • The right medical facility, closest hospital or regional trauma center The crash data could help doctors determine what kind of treatment may be needed, and enable them to ready an appropriate medical team. At a trauma center, the trauma teams will be able to better prepare to deliver optimal care for seriously injured crash victims which includes timely and accurate diagnoses, intensive critical care facilities and staff, readily available trauma teams with surgeons specializing in brain and spinal cord injuries, internal organ injuries, and orthopedic injuries. 	<p>Page 111, Line 20 - Page 112, Line 4</p> <p>For www.comcare.org PCNS provides metrics which support critical decisions such as:</p> <ul style="list-style-type: none"> • The appropriate EMS required unit, basic or advanced If the crash data predict severe injury, it will help emergency services to send the appropriate advanced life care support. • The mobilization of specialized professionals PCNS data will let emergency staff in hospitals prepare appropriate course of action for injured, on crash site and in hospital. The right medical facility, closest hospital or regional trauma center. It helps doctors determine what kind of treatment may be needed, and which appropriate medical team. • The right medical facility, closest hospital or regional trauma center The crash data could help doctors determine kind of treatment needed and appropriate medical team in order to be able to deliver appropriate care for seriously injured crash victims. 	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>

<p>Page 134, Line 25 - Page 135, Line 6</p> <p>As mentioned above, the data emitted by the post-crash notification systems give responders further refining to respond and to administer the most appropriate and effective medical treatment care. This is far more valuable than just a localized indication that simply denotes that a crash occurred as in the crash notification systems.</p> <p>The safety value is very substantial for vehicles that produce car crash data. The post-crash notification systems will allow the prediction of the probability of severe injury, and the probabilities of specific injuries. It would allow moving from simple knowledge of a crash, to a clear picture in real time of the severity of the crash. By enhancing the crash information that emergency and medical teams receive, the appropriate type of response assistance will be more efficient.</p>	<p>Page 112, Line 6-15</p> <p>As mentioned above, the data emitted by the post-crash notification systems give responders further refining to react and to deliver most suitable medical treatment. This is far more valuable than just a limited localized warning for a crash occurred as in the crash notification systems.</p> <p>The safety value is very substantial for vehicles that produce car crash data. For ComCARE,” the post-crash notification systems will allow the prediction of the probability of severe injury, and the probabilities of specific injuries...it would allow moving from simple knowledge of a crash, to a clear picture in real time of the severity of the crash¹⁸⁴. By enhancing the crash information that emergency and medical teams receive, the appropriate type of response assistance will be more efficient.”¹⁸⁵</p>	<p>参考文献を加えて明確な表現にした修正のため、訂正を認める。</p>
<p>Page 135, Line 7-25</p> <p>Sensors technologies (considered as part of ubiquitous technologies)</p> <p>The post-crash notification systems combine information from vehicle crash sensors and local positioning technology, and transmit it to EMS via wireless technologies. The engineering issue is connecting that data source to the communications capability in the car. The post-crash notification systems use a series of strategically located crash sensors that collectively calculate accident’s severity and analysis, capture, and relay data with a range of critical technical information. The system discerns between front, side and rear impacts and a broad range of data including near and complete air bag deployment, number of impacts, severity calculations and rollovers.</p> <p>Sensors are connected to vehicle networking architecture. A sensing module receives a full perspective of the crash from the crash sensors via the vehicle’s electronic architecture. Sensors measure the number, magnitude, and direction of impact forces.</p> <p><i>Sensor’s software</i></p> <p>Software is needed to translate crash sensor measurements of accelerations, direction of crash forces, and crash configuration into an easily understandable rating of crash severity for emergency medical dispatch. The software would at least</p> <ol style="list-style-type: none"> 1. measure metrics of the forces to know the magnitude of the crash impact; 2. measure principal direction of force (frontal, sides, and rear); 	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>

3. estimate whether and how many times a vehicle has rolled.		
<p>Page 136 /Line 6-13 The Plan develops as well four “Programmatic Themes” to apply technologies to the problems and priorities of surface transportation:</p> <ol style="list-style-type: none"> 1. Integrated Network of Transportation Information 2. Advanced Crash Avoidance Technologies that concern primary and secondary safety systems and selected automated enforcement 3. Automatic Crash & Detection, Notification and Response for faster and reliable incident detection and notification, and improved response time 4. Advanced Transportation Management 	削除	冗長な記述の削除と認められるため、訂正を認める。
<p>Page 137, Line 1-14 Pre-crash safety measures:</p> <ul style="list-style-type: none"> • <i>Intersection Collision Avoidance Systems</i> which monitor a vehicle's speed and position relative to the intersection, along with the speed and position of other vehicles in the vicinity, advising the driver of appropriate actions to avoid a right-of-way violation or impending collision. • <i>Rear-End Collision Avoidance Systems</i> which sense the presence and speed of vehicles ahead, and provide warnings to avoid collisions. • <i>Road Departure Collision Avoidance Systems</i> which could prevent vehicles run-off-road crashes. These systems track the lane or road edge and suggest safe speeds for the road ahead. <p>Post-crash safety measures:</p> <ul style="list-style-type: none"> • <i>Automated Crash Notification Systems</i> transmit crash information such as collision force and angle of impact to assist responders in determining what type of help to send and where to transport the injured. 	削除	冗長な記述の削除と認められるため、訂正を認める。
<p>Page 137, Line 18-24 A main player in the coordination of EMS and ITS in USA is a not-for-profit organization^{xxviii} called Communications for Coordinated Assistance and Response to Emergencies, or ComCARE Alliance¹³⁶. The stated objective of the ComCARE Alliance is “to encourage and facilitate cooperation across professional, jurisdictional, and geographic lines, seeking to break down the walls that separate these agencies and professions and limit their effectiveness. Our goal is to promote a coordinated approach to emergency services”¹³⁷</p>	<p>Page 113, Line 9-12 A main player in the coordination of EMS and ITS in USA is a not-for-profit organization called Communications for Coordinated Assistance and Response to Emergencies, or ComCARE Alliance¹⁸⁸. The stated objective is to promote a coordinated approach to emergency services”¹⁸⁹</p>	冗長な表現をなくした修正のため、訂正を認める。

<p>Page 137, Footnote ^{xxviii}ComCARE Alliance, a broad-based national coalition of more than 90 organizations representing physicians, emergency medical technicians, emergency (911) call directors, automotive companies, consumer organizations, telematics suppliers, wireless technology companies, transportation companies, law enforcement groups, and others</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 138, Line 1-7 The ComCARE Alliance supports legislation to accelerate post-crash notification systems development and deployment. In 1999, DOT and ComCARE co-sponsored the first national conference on coordinating emergency response with intelligent transportation systems. The trend toward broadening ITS deployments to include the public safety community recognized the need for greater coordination of multi-agency operations to enhance public safety and health. Medical members of ComCARE are:</p>	<p>Page 113, Line 13-16 The ComCARE Alliance supports legislation to accelerate post-crash notification systems development and deployment. The ITS deployments would include the public safety community for coordination of multi-agency operations to enhance public safety. Medical members of ComCARE¹⁹⁰ are:</p>	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 138, Line 23-27 NMRI is a public-private partnership of more than twenty national organizations which have been meeting to develop and address issues that arise in the dealings between PCNS providers (such as OnStar) and the nation's public emergency response agencies. NMRI is supported by USDOT funds and a grant from General Motors/OnStar.</p>	<p>Page 114, Line 5-8 NMRI is a public-private partnership dealing between PCNS providers (such as OnStar) and the nation's public emergency response agencies. NMRI is financially supported by both USDOT funds and General Motors/OnStar grant.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 139, Line 2-18 ITS America, based on its EMS-related recommendations to the U.S. Department of Transportation's (USDOT) ITS Program, estimated that ITS technologies cannot be realized "without immediate and substantive input from the EMS community". ITS America believes that the EMS community must be involved <i>long before</i> technology is introduced, in order to assure its seamless integration into the existing EMS system. Indeed, some EMS members of ComCARE took the initiative to ask the car industries for PCNS, with crash sensors aiming to record data for a vehicle algorithm crash developed by Crash Injury Research and Engineering Network (CIREN)¹³⁹. CIREN is a multi-disciplinary collaboration of research on crashes and injuries at eight <i>Level 1 Trauma centers</i>. Six of these Centers are funded by US DOT, one by Honda R&D Co. Ltd. and another by Toyota Motor North America, Inc. Level 1 Trauma Centers are usually affiliated to an university¹⁴⁰. The mission of the Crash Injury</p>	<p>Page 114, Line 11-21 ITS America, based on its EMS-related recommendations to the U.S. Department of Transportation's (USDOT) ITS Program, estimated that ITS technologies cannot be realized "without immediate and substantive input from the EMS community"¹⁹². ITS America believes that "the EMS community must be involved long before technology is introduced, in order to assure its seamless integration into the existing EMS system"¹⁹³. Indeed, some EMS members of ComCARE took the initiative to ask the car industries for PCNS, with crash sensors aiming to record data for a vehicle algorithm crash developed by Crash Injury Research and Engineering Network (CIREN)¹⁹⁴, a multi-disciplinary collaboration of eight "Level 1 Trauma Center" (six funded by US DOT, one by Honda. and one by Toyota)¹⁹⁵.doing research on crashes and injuries</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>

<p>Research and Engineering Network (CIREN) is to improve the prevention, treatment, and rehabilitation of motor vehicle crash injuries to reduce deaths, disabilities, and human and economic costs. The purpose was to improve triage, transport, and treatment of people injured in crashes. Indeed, CIREN researchers are working to improve both the prevention and treatment of crash injuries.</p>		
<p>Page 139, Line 19 - Page 141, Line 17 5.5.3.2.2 Illustration of a successful partnership: data analysis, data algorithm and software for post-crash notification system Data analysis In 2001 ComCARE produced a consensus on crash data which could be provided by a PCNS and communicated it to all the major US-based automobile companies in 2002. In response, the telematics providers e.g. OnStar said they would provide emergency data to response agencies, but advocated a standardization of the data set that would be used to move information from them to emergency agencies. They asked ComCARE to facilitate that process. In the same year, over 20 public and private organizations participated, led by CIREN, in developing a standardized Vehicular Emergency Data Set (in XML) for use in vehicle emergencies. Crash Injury Research and Engineering Network (CIREN) convened a multidisciplinary team for the study of the prevention and treatment of serious crash injuries. Its team members include:</p> <ul style="list-style-type: none"> • EMS related professions: trauma surgeons, emergency physicians, medical examiners, trauma nurses, epidemiologists... • vehicle crashworthiness engineers • computer data analysts. <p>The multidisciplinary team members conducted a series of statistical analyses data on crashes, deaths, and injuries. EMS clinicians and crash engineers worked together to understand injury-producing mechanisms, to develop criteria for vehicle safety design, and to assess emerging injury patterns for diagnosis, and treatment of crash injuries. The CIREN Program focused medical and engineering research on finding ways to reduce crash deaths and critical injuries. CIREN research was examining questions such as:</p> <ul style="list-style-type: none"> • What information will help the emergency medical system work “faster and smarter” in providing optimal care and delivering seriously injured crash victims to trauma centers? • How can new safety and communications technologies be used to improve triage, transport, and treatment decisions? 	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>

<ul style="list-style-type: none"> • How, and to what extent, are new safety technologies working to save lives and reduce disabilities? <p>The team used the following time intervals of data available on the delivery of patients to definitive care within the “Golden Hour”¹⁴¹:</p> <ol style="list-style-type: none"> (1) time between crash occurrence and EMS notification (2) time between EMS notification to EMS scene arrival (3) time between EMS onsite and hospital (4) recommended time by EMS <p>Team members addressed new technologies that create opportunities in each of the five categories to act more rapidly and effectively to transport patients to obtain definitive care within the "Golden Hour."</p> <p>Data algorithm/software</p> <p>An objective¹⁴² of CIREN research was to develop crash injury probabilities associated with vehicle crash sensor measurements of crash severity for post-crash notification software. As the team conducted statistical analyses on fatal crashes and injury crashes, a mathematical algorithm was created to generate statistical probabilities of serious injury based on crash parameters. CIREN developed software to convert the crash severity data from vehicle sensors into an urgency rating that could provide EMS dispatchers with a probability rating of the presence of serious injuries. Using crash data, the algorithm upon vehicle impact predicts a rating of urgency from 0 to 100%¹⁴³.</p> <ul style="list-style-type: none"> – Low probability (0-10%) of serious injury – Moderate probability (11-49%) of serious injury – High (50+%) probability of serious injury <p>As a result, CIREN recommended use of PCNS software to produce significant improvement in post-crash care with substantial benefits in reductions of deaths and disabilities from crash injuries.</p>		
<p>Page 142, Line 11-20</p> <p>(2) Integration problem: CNS center operators usually verify the accuracy of the information and then relay the emergency message. Improved integration should be a joint priority of both the EMS and the CNS communities. It is in the public’s best interest for emergency calls to be accurately routed to emergency control centers as quickly and effectively as possible.</p> <p>(3) No EMS input in ITS technologies design and development: The EMS ITS-related technologies have entered the market without sufficient developmental input from the EMS community. The EMS community is not yet working with the ITS community to integrate</p>	<p>Page 115, Line 17-25</p> <p>(2) Integration problem: CNS operators usually validate the information accuracy and then relay the emergency message. Improved integration should be a priority of both the EMS and the CNS communities as emergency calls would be accurately routed to emergency control centers as quickly and effectively as possible.</p> <p>(3) No EMS input in ITS technologies design and development: The EMS ITS-related technologies have move in the market without adequate input from the EMS community. The EMS community is not yet working with the ITS community to integrate emergency operations. In-vehicle ITS systems, including PCNS still offer</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>emergency incident response operations and communications. In-vehicle ITS systems, including PCNS still offer challenges to the EMS community.</p>	<p>challenges to the EMS community.</p>	
<p>Page 143, Line 28 - Page 144, Line 5 Indeed such COE can host collaborative academic projects between medical and engineering researchers, which aim to implementation in the real world. The nature of PCNS is that a wide variety of parties are involved in developing, sharing and using crash and related data. This might be led as well by an organization to insure coordination and inclusion of groups such as leaders in emergency medicine. Process might be institutionalized in a non-profit consortium, with equal public and private representation.</p>	<p>Page 117, Line 4-8 Indeed, such COE can host collaborative academic projects between medical and engineering researchers, which aim to implementation in the real world. The nature of PCNS is might be led as well by an organization to insure coordination and might be established within a non-profit association, with public and private equal presence.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 144, Line 7-22 From the New IT Reform Strategy (NITRS) and the 8th safety program, the following specific statements are related to post-crash systems:</p> <ul style="list-style-type: none"> • <i>Reducing the annual number of any casualties to one million or less by 2010.</i> • <i>collaboration between the various involved government agencies as well as the private sector to realize advanced ITS and leads Japan into the world's safest road traffic society.</i> • <i>The government will improve rescue and emergency services systems and emergency medical care services by promoting closer liaison and cooperation with emergency-related organizations such as emergency medical facilities.</i> • <i>The improved systems will be designed to deal with road traffic accidents to save the lives of people injured in traffic accidents and to minimize the harm and damage caused by accidents.</i> <p>Although these post-crash concerns, without formally naming them it, are identified by official documents, no post-crash safety measures are currently under study as extensively and intensively as in other safety areas such as pre-crash safety measures in Japan.</p>	<p>Page 117, Line 10-13 From the New IT Reform Strategy (NITRS) and the 8th safety program, these post-crash concerns, without formally naming them it, are identified by official documents, no post-crash safety measures are currently under study as extensively and intensively as in other safety areas such as pre-crash safety measures in Japan.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 145, Line 13-16 This difference in approach seems to arise from the fact that Japan's ITS is positioned as a tool to promote research and development of new technologies for road traffic safety, "to expand and create new markets for automotive and data communication-related industries."¹⁴⁷</p>	<p>Page 118, Line 3-5 This difference in approach seems to arise from the fact that Japan's ITS is positioned as a tool to promote research and development of new technologies for road traffic safety, "to create new markets for auto and info-communication-related sectors."¹⁹⁹</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 145, Line 19</p>	<p>Page 118, Line 8</p>	<p>綴り修正のため</p>

It can be concluded that ITS in Japan had a obvious flaw regarding ITS area 9 EMS,	It can be concluded that ITS in Japan had an obvious flaw regarding ITS area 9 EMS,	め、訂正を認める。
Chap VI Globalization		
訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 147, Line 8-21 Literatures confirm Japan as a global-oriented country when it comes to export. Weiss¹⁴⁸ states that Japan, in its industrial transformative capacity, coordinates industrial change in accordance with the changing conditions of international technological competition. Elder¹⁴⁹ affirms that Ministry of International Trade and Industry (MITI) as a major player of Japanese industrial policy was even refurbished as Ministry of Economy, Trade and Industry (METI) – an institutional change that could be interpreted as a reflection of the branching out of industrial policies beyond catch-up patterns of the past, strategically turning towards economy-wide concerns with international competitiveness and technological innovation. Evans¹⁵⁰ differentiates entrepreneurial role of the state as generator of public-private symbiosis to generate the synergies required for the establishment of a high-technology industry that is competitive in international markets. As such, Japan’s entrepreneurial role in setting ITS would need to be competitive, not only locally but also globally.</p>	<p>Page 119, Line 8-15 Literatures confirm Japan as a global-oriented country when it comes to export. Weiss²⁰⁰ states that Japan, in its industrial transformative capacity, matches industrial change in accordance with the changing international technological competition. Evans²⁰¹ differentiates entrepreneurial role of the state as generator of public-private association to generate the collaborations required for the foundation of a competitive high-technology industry in global markets. As such, Japan’s entrepreneurial role in setting ITS would need to be competitive, not only locally but also globally.</p>	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 147, Line 23 - Page 148, Line 2 The 1996 "Comprehensive Plan for ITS in Japan"¹⁵¹ mentions that ITS brings a dynamic and intense international competition behind the scenes in the field of technological development and Japan should seize this opportunity to take the lead in the international arena through ITS promotion.</p>	<p>Page 119, Line 17-19 The 1996 "Comprehensive Plan for ITS in Japan"²⁰² mentions that “ITS brings a dynamic and intense global competition in technological development and Japan should seize this opportunity to take the lead in the global arena through ITS²⁰³.”</p>	参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。
<p>Page 148, Line 29 - Page 149, Line 2 Japan has been very successful in translating its strengths in vehicle, telecom and electronics technology into successful ITS in its local market. It should be the same globally.</p>	<p>Page 120, Line 26-27 As Japan has been very successful in integrating its technological superiority in automobile, telecom and IT into ITS locally. It should be the same globally.</p>	冗長な表現をなくした修正のため、訂正を認める。
<p>Page 149, Line 8-14 Transportation of people and goods is extremely vital to the national economy. Economic development comes with increase of different traffic problems: mainly congestion and accidents. Transport</p>	<p>Page 121, Line 6-8 Transportation of people and goods is extremely vital to the national economy. Economic development comes with increase of different traffic problems: mainly congestion and accidents.</p>	冗長な表現をなくした修正のため、訂正

<p>problems are growing fastest in countries with developing economies, where the severity of traffic problems is growing in the midst of rapid urbanization, population concentration, increasing use of motorized vehicles, underdeveloped road network, budget restrictions and lack of human and physical resources.</p>		<p>を認める。</p>
<p>Page 149, Line 16-19 Importance of infrastructure to enable developing states to achieve growth, as infrastructure is the backbone of economies. It is an indisputable fact that infrastructure development and economic development have always been closely linked.</p>	<p>Page 121, Line 10-12 Infrastructures enable developing states to achieve growth, as its the backbone of economies infrastructure development (as a prerequisite for) economic development are closely associated.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 150, Line 2-4 Infrastructure investments also represent untapped potential for the creation of productive employment. Increasing the stock of infrastructure by 1 percent could add 1 percent to the level of GDP¹⁵⁶.</p>	<p>Page 121, Line 20-22 Infrastructure investments also represent opportunities for the job creation²⁰⁸. Increasing the stock of infrastructure by 1 percent could add 1 percent to the level of GDP²⁰⁹.</p>	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 151, Line 6-21 In Asia, the economic growth has resulted in a great need for infrastructure development and financing in Asia. However, financing gaps remain due to local limited capabilities. The World Bank, Asian Development Bank (ADB), and the Japan Bank for International Cooperation (JBIC) joint study report published in March 2005 under the title “Connecting EAST ASIA: A New Framework for Infrastructure^{xxxi}.” Report points that the financing needs in infrastructure development in East Asia amount to USD 228 billion per year for the period 2006–2010 (which amount to 1,140 billion in total) but only USD 48 billion can be secured. The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) estimates the investment needs for transport infrastructure in developing and transition economies of the ESCAP region at an average of US\$224 billion per year between 2005 and 2015¹⁵⁸. This includes investments in the Indian sections of the Asian Highway of roughly US\$ 3.6 billion. Similarly, the Chinese government plans to construct 400,000 kilometers of new roads to connect 80 percent of China by 2020, additionally to currently committed investments of US\$ 6.6 billion in Chinese highways.</p>	<p>Page 123, Line 2-17 In Asia, the economic growth has resulted “in a great need for infrastructure development and financing in Asia. However, financing gaps remain due to local limited capabilities”²¹¹. The World Bank, Asian Development Bank (ADB), and the Japan Bank for International Cooperation (JBIC) joint study report published in March 2005 under the title “Connecting EAST ASIA: A New Framework for Infrastructure^{xxvi212}.” Report points “that the financing needs in infrastructure development in East Asia amount to USD 228 billion per year for the period 2006–2010 (which amount to 1,140 billion in total) but only USD 48 billion can be secured”. The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) estimates²¹³ “the investment needs for transport infrastructure in developing and transition economies of the ESCAP region at an average of US\$224 billion per year between 2005 and 2015. This includes investments in the Indian sections of the Asian Highway of roughly US\$ 3.6 billion. Similarly, the Chinese government plans to construct 400,000 kilometers of new roads to connect 80 percent of China by 2020, additionally to currently committed investments of US\$ 6.6 billion in Chinese highways”²¹⁴.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。</p>
<p>Page 152, Line 5-11 In 2000, the UN agreed the Millennium Development Goals which</p>	<p>削除</p>	<p>冗長な記述の削除と認めら</p>

<p>consist of key areas of action by which the international community aims to achieve significant and measurable improvements in people's lives by the target year of 2015. Road traffic injuries were not then recognized as a major public health concern. They did not identify road safety as a specific matter of concern, whilst malaria and tuberculosis do feature prominently in the Millennium Development Goals, despite having a similar impact on mortality and injury.</p>		<p>れるため、訂正を認める。</p>
<p>Page 152, Line 12-15 The 2004 World Report on Road Traffic Injury Prevention observes that the world faces a road safety crisis that has not been still fully recognized¹⁵⁹, despite the 2002 and expected 2030 numbers, as shown in Figures 6.3 and 6.4. Figure 6.5 shows updated estimation, by the same author of figure 6.4, for 2030.</p>	<p>Page 123, Line 22-25 The “2004 World Report on Road Traffic Injury Prevention” notes that road safety crisis that has not been still fully recognized²¹⁵, despite the 2002 and expected 2030 numbers, as shown in Figures 6.3 and 6.4. Figure 6.5 shows updated estimation, by the same author of figure 6.4, for 2030.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 154, Line 8-16 In 2004, the UN General Assembly held its first ever plenary debate on the issue of road safety. The World Health Organization, UNICEF, and the World Bank, the General Assembly adopted a resolution¹⁶¹ on ‘Improving Global Road Safety’. The resolution was a call to action by the international community to reverse the rising toll of deaths and injuries on the road. It recognized the importance of road safety and the need to build capacity in developing countries by providing financial and technical support. As such, the 2004 World Report on Road Traffic Injury Prevention, and the General Assembly decisions recognized of road safety as a major public policy concern.</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 154, Line 20 - Page 155, Line 14 The key findings presented in in the World report on road traffic injury prevention¹⁶² are summarized as follow: For 2002, -1.2 million people died as a result of road traffic collision (on average 3242 people were killed daily). -20 million to 50 million people were injured or disabled in road collisions. -Road traffic injuries were the 10th leading cause of death worldwide and accounted for 2.1% of all deaths globally, as shown in Figures 6.3, 6.4. and 6.5 -Road traffic deaths accounted for 23% of all injury deaths worldwide. -90% of road traffic deaths occurred in low-income and middle-income countries, where 5.1 billion people or 81% of the world's population live and own about 20% of the world's vehicles.</p>	<p>Page 126, Line 4-10 The key findings from the World report on road traffic injury prevention²¹⁷ are the following -Road traffic injuries are predicted to rise from tenth place in 2002 to eighth place by 2030 as shown in Figure 6.4, updated by the same author in 2008 as shown in Figure 6.5 As shown in Figure 6.6, World Bank data point out that injuries will rise radically by the year 2020.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>-Nearly a quarter of all non-fatally injured victims requiring hospitalization sustain a traumatic brain injury as a result of motor vehicle crashes.</p> <p>For the future situation</p> <p>-Road traffic injuries are predicted to rise from tenth place in 2002 to eighth place by 2030 as shown in Figure 6.4, updated by the same author in 2008 as shown in Figure 6.5</p> <p>World Bank data shows that, without appropriate action, these injuries will rise dramatically by the year 2020 as shown in Figure 6.6.</p>		
<p>Page 155, Line 17-18</p> <p>-Road traffic deaths are predicted to increase by 83% in low-income and middle-income countries (if no major action is taken).</p>	<p>Page 126, Line 13-14</p> <p>-Road traffic deaths are predicted to increase by 83% in low-income and middle-income countries (if no major action is taken)²¹⁸.</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 156, Line 2</p> <p>Source: Kropits E., Cropper M.</p>	<p>Page 126, Line 17</p> <p>Source: Kraits E., Cropper M.</p>	<p>正しい出典情報への変更のため、訂正を認める。</p>
<p>Page 156, Line 4-16</p> <p>From above figure 6.5, South East Asia is experiencing the highest number of actual fatalities and injuries and the highest predicted growth in road traffic injuries: 144% followed by East Asia, almost 80%.</p> <p>-Issues 2: financial cost of traffic accidents</p> <p>Road crash deaths, on economic grounds consume massive financial resources that developing countries cannot afford to lose. It is estimated¹⁶⁴ that road traffic crashes cost:</p> <p>-US\$ 65 billion in low-income and middle-income countries, exceeding the total amount received in development assistance. These costs are comparable with the total bilateral overseas aid contributed by the industrialized countries, which amounted to \$106.5 billion in 2005.</p> <p>-between 1% and 1.5 % of gross national product in low-income and middle-income countries (2% of gross national product in high-income countries)</p>	<p>Page 127, Line 1-8</p> <p>From above figure 6.5, South East Asia has highest number of actual fatalities and injuries and the highest predicted growth in road traffic injuries: 144% followed by East Asia, almost 80%.</p> <p>-Issues 2: financial cost of traffic accidents</p> <p>Road crash deaths consume enormous financial assets that developing nation cannot afford to misplace. It is estimated²²⁰ that road traffic crashes cost 1% and 1.5 % of gross national product in low-income and middle-income countries (2% of gross national product in high-income countries)</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 157, Line 2-4</p> <p>Additionally, to the human and financial issues, Asian countries gave a priority for ESRs, as stated by the 2006 Busan Ministerial Declaration on Improving Road Safety in Asia and the Pacific¹⁶⁵</p>	<p>Page 127, Line 10-12</p> <p>Additionally, to the human and financial issues, Asian countries gave a priority for ESRs, as stated by the 2006 Busan Ministerial Declaration on Improving Road Safety in Asia and the Pacific²²¹</p>	<p>参考文献を明示したため、訂正を認める</p>

(excerpts)	(excerpts from www.oecd.org)	る。
<p>Page 157, Line 22-23 <i>Invite the members and associate members of the Commission to address road safety in the following areas:</i></p>	<p>Page 128, Line 5-6 <i>Invite the members and associate members of the Commission to address road safety in the following areas (excerpts from www.oecd.org):</i></p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 158, Line 8-14 ITS should be promoted to become part of transport policy. To equip ITS infrastructure at the same time that physical road infrastructure would be built at a far lower cost than doing these separately, as has mainly been the case in developed countries. Asian countries have greater opportunity to include IT and ITS facilities in the initial construction of roadway infrastructure. In developed countries, these facilities have to be retrofitted, to existing roadways, and the cost of doing so might increase the implementation cost of ITS.</p>	<p>Page 128, Line 18-20 ITS should be promoted to become part of transport policy. To install ITS equipment simultaneously to the road infrastructure construction at a much lower cost than doing these on consecutive steps, as has mainly been the case in developed countries.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 158, Line 17 - Page 159, Line 2 The rapid diffusion of ICT technologies such as IT, internet and cellular phones are important economic enablers. Since ICT (IT, Internet, and mobile phones) widespread very rapidly in developing economies, building an environment in which many people have access to these related technologies might lay the groundwork for many kinds of ITS applications to be introduced and to solve traffic problems. Road infrastructure should take advantage of this trend by deploying ITS applications which use these technologies as platform. The opportunity is to deploy ITS by leveraging the existing IT infrastructure. Most ITS applications use wireless communications and most developing countries have well developed communications infrastructures. ITS can take advantage of these technologies to make ITS deployment more economic, without the need for significant investment in separate communications infrastructure. Using existing mobile communication infrastructure reduces the time and cost to introduce ITS and accelerates the benefit delivered by ITS.</p>	<p>Page 128, Line 23 - Page 129, Line 5 The rapid diffusion of ICT technologies such as IT, internet and cellular phones are important economic enablers. ICT (IT, Internet, and mobile phones) widespread very rapidly in developing economies lay the groundwork for many type of ITS applications to be deployed and to solve traffic problems. The opportunity is to install ITS equipments by leveraging the existing IT infrastructure. Most ITS applications use wireless communications and most developing countries have well developed communications infrastructures. ITS can take advantage of these technologies to make ITS deployment more economic, without requiring significant investment in additional communications infrastructure.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 159, Line 4-10 Many countries with low GDP are short of funding for expensive infrastructure developments. Because of their cost, solutions to traffic problems are commonly assigned low priority. Additionally, road safety is not formally recognized as a specific category of development assistance, and usually consists of a small component of aid to the road transport sector. This lack of international interest in</p>	<p>Page 129, Line 7-8 Most countries with low GDP cannot afford expensive infrastructure developments and since the cost of traffic problems, solutions became low priority.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

road safety reinforces the tendency for road safety to be a low priority in many developing countries.		
<p>Page 159, Line 16-21</p> <p>It is not financially advantageous for the Asian government alone to build ESRs because it would bear a significant amount of fiscal burden. Instead, it is possible for the government to finance projects from public funds or aid from foreign governments. If they obtain loan from foreign governments, they would also suffer the burden of external debts. Another method to raise funds is by obtaining financing from multi-lateral international aid-giving agencies such as the World Bank.</p>	<p>Page 129, Line 13-18</p> <p>It is not financially advantageous for the Asian government alone to build ESRs because it would bear a significant amount of fiscal burden. As an alternative, it might be possible for the local government to fund infrastructures from local public or foreign assets. If they obtain loan from foreign governments, they would also suffer the burden of external debts. Another method to raise funds is by obtaining funding from international aid organizations such as the World Bank.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 159, Line 23-26</p> <p>Private Financing refers to a private enterprise implementing the whole project. Because of commercial viability of the project, the private enterprise can earn profits. The private sector has invested approximately \$190 billion in East Asian infrastructure since 1990, as shown in Figure 6.7.</p>	<p>Page 129, Line 20-23</p> <p>Private Financing refers to a private enterprise implementing the whole project due to the profitable viability of the project which will generate profits to the private enterprise. The private sector has invested approximately \$190 billion in East Asian infrastructure since 1990²²², as shown in Figure 6.7.</p>	<p>参考文献を加えて明確な表現にした修正のため、訂正を認める。</p>
<p>Page 160, Line 6-13</p> <p>On the other hand, it is difficult to carry out all ESRs projects using private funding because not all projects are commercially viable enough to enable private enterprises to make profits. Should the Asian state be unable to promote ESRs projects other than those to which private financing is applicable, these states would face serious difficulty in achieving economic growth.</p> <p>This situation brings the following dilemma: if the government plays the entire role in ESRs projects, it would suffer fiscal burden and external debts, if private enterprises play the entire role, it would be applicable only to limited number of projects.</p>	<p>Page 130, Line 5-8</p> <p>Because not all infrastructures are financially sustainable enough to private sector enterprises, it is hard to carry out all ESRs projects using private funding. The Asian state unable to promote ESRs projects would not achieve economic growth with following problems: Government would suffer fiscal burden and external debts.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 161, Line 2-13</p> <p>Under PPF, the government bears part of necessary financing while private enterprises undertake the rest on a commercial basis. Consequently, the government can reduce spending for such part undertaken by the private sector. PPF can be considered as a partnership for implementing a public infrastructure project according of a sharing of financing and risk between the public sector and the private sector. The government would support PPF through measures such as tax exemptions, minimum revenue guarantee, and other various measures to mitigate the risks inherent in infrastructure projects. PPF enables appropriate intervention by the private enterprises to enable them to earn profits in the projects that might</p>	<p>Page 131, Line 2-9</p> <p>Under PPF, the government commits itself to the financing while private sector agrees to the rest on a business basis. PPF could be considered as a partnership as share funding share and taking risk between both private and public sectors The government would support PPF through fiscal, revenue pledge and any other measures to diminish risks intrinsic to infrastructure developments. PPF enables private enterprises to earn profits in the projects. PPP can be considered as a partnership for the private sector, through financing public services and through market mechanisms, thereby promoting economic growth.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>cause losses without such PPF. PPP can be considered as a partnership for the private sector, through financing, to participate in providing public services through market mechanisms, thereby promoting economic growth.</p>		
<p>Page 161, Line 19-20 As previously demonstrated, the construction and maintenance of transport infrastructure represents a technological, financial and institutional investment.</p>	<p>Page 131, Line 15-16 As previously demonstrated, the construction and maintenance of transport infrastructure represents a technological, financial and institutional investment²²³.</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 162, Line 2-3 Evans¹⁶⁶ differentiates entrepreneurial roles of the state for the establishment of a high-technology industry that is competitive in international markets.</p>	<p>Page 132, Line 1-3 Evans²²⁴ differentiates entrepreneurial role of the state as generator of public-private association to generate the collaborations required for the foundation of a competitive high-technology industry in global markets.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 162, Line 13 - Page 163, Line 22 The new IT strategy has been formulated based on several principles, including the following ones): -Significant Advancement through Structural Reforms <i>Turning to industrial competitiveness, Japan internationally dominates in the technical areas of mobile communications and RFID tags, etc. It is now necessary to use industries where we already have a technical advantage, and at the same time further improve business efficiency to establish an upward growth cycle through IT-related industries that have the capability of creating new added-values. In addition, it is necessary to promote reforms for industrial structures through the establishment of IT-based management that will serve to help maintain and strengthen our international industrial competitiveness in such a way as to create a state where, instead of struggling to catch up, Japan is rather leading the world.</i> -International Contribution and the Strengthening of International Competitiveness <i>... in addition to the strength of our IT industries, Japan has some of the world's most advanced ultra high-speed broadband (utilizing optical fiber technology, etc.) IT infrastructure and this infrastructure shall now serve as a foundation for the development of our IT society.</i> Solving important social problems that face all humankind by making use of the unique characteristics of our nation and by further emphasizing the perspective of the consumer and citizen as</p>	<p>Page 132, Line 13-28 The new IT strategy has been formulated based on several principles, including the following ones excerpts from http://japan.kantei.go.jp/policy/it/ITstrategy2006.pdf: -International Contribution and the Strengthening of International Competitiveness <i>Solving important social problems that face all humankind by making use of the unique characteristics of our nation and by further emphasizing the perspective of the consumer and citizen, we will be in a position to provide various solutions to world problems, and these solution models along with our power for reform can serve as areas where Japan can—and should—contribute globally. It is particularly in Japan's own interest to actively make such global contributions in the IT area focusing on the Asia region.</i> International contribution by providing problem-solving models and contributions to other Asian countries using IT <i>Japan is required to proactively contribute to the development of Asian economies through IT, such as the realization of effective and secure circulation of people, goods, money, services, and information using IT, etc</i>²²⁵.</p>	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>

<p><i>we go forward with our IT revolution to put in place a ubiquitous network, we will be in a position to provide various solutions to world problems, and these solution models along with our power for reform can serve as areas where Japan can—and should—contribute globally. It is particularly in Japan’s own interest to actively make such global contributions in the IT area focusing on the Asia region.</i></p> <p>International contribution by providing problem-solving models and contributions to other Asian countries using IT</p> <p><i>As one of the world’s most advanced IT nation, Japan is required to take an appropriate role in international society, and its responsibility within the Asian region to which Japan belongs is significant. For this reason, Japan must strive to utilize IT to realize solutions to the important social issues facing all nations, including Asian nations, in the 21st century.</i></p> <p><i>As people, goods, money, services, and information begin to move more and more within the area, Japan is required to proactively contribute to the development of Asian economies through IT, such as the realization of effective and secure circulation of people, goods, money, services, and information using IT, etc.</i></p>		
<p>Page 163, Line 25 The document emphasizes following points:</p>	<p>Page 133, Line 3 The document²²⁶ emphasizes following points (excerpt from www8.cao.go.jp):</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 163, Line 26 - Page 164, Line 13 Strengthening Japan’s S&T capabilities <i>Japan has promoted Science and Technology (S&T) by setting the goal of “becoming an advanced science- and technology-oriented nation” as a national strategy. Under the circumstances, it is quite natural for Japan, the country which aims to become an “advanced science and technology-oriented nation,” and has world-leading S&T, to utilize its superior S&T expertise for diplomacy in a strategic manner. Japan’s past S&T diplomacy had tended to be passive and Japan often failed to fully demonstrate its leadership, shift to S&T diplomacy where Japan and takes actions actively.</i> -Strengthening Science and Technology (S&T) cooperation with</p>	<p>Page 133, Line 4-16 Strengthening Japan’s S&T capabilities <i>Japan has promoted Science and Technology (S&T) by setting the goal of “becoming an advanced science- and technology-oriented nation” as a national strategy. Japan’s past S&T diplomacy had tended to be passive and Japan often failed to fully demonstrate its leadership, shift to S&T diplomacy where Japan and takes actions actively.</i> -Strengthening Science and Technology (S&T) cooperation with developing countries for resolving global issues Companies and private non-profit organizations have come to play a greater role in many areas of international cooperation. A large</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>developing countries for resolving global issues <i>Japan will implement S&T cooperation with developing countries on global issues concerning global warming, infectious diseases, water/food, and disasters, according to the social needs of the relevant countries. Companies and private non-profit organizations have come to play a greater role in many areas of international cooperation. A large part of the technology directly linked to the development of developing countries, is held by private companies.</i> Page /Line - Therefore, private companies are expected to expand their investment and provide further contributions of personnel in developing countries.</p>	<p><i>part of the technology directly linked to the development of developing countries, is held by private companies. Therefore, private companies are expected to expand their investment and provide further contributions of personnel in developing countries.</i></p>	
<p>Page 164, Line 21 Enhancement of international competitiveness by</p>	<p>Page 134, Line 1 Enhancement of international competitiveness²²⁷ by</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 165, Line 7-14 (2) Global innovation center <i>While there are consumers and users in the industrial sector who demand high quality in Japan, a large number of companies and a broad range of industries which can meet such demands with sophisticated materials for parts and technologies are clustered in this relatively small country. Those companies have produced new products one after another by learning from others and through reliable joint development between upstream and downstream companies, etc., and the ability to do this is one of Japan's strengths</i></p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 165, Line 16-18 It is recommended that the Japanese PPP take an active role in promoting and implement ITS. In such partnership framework, the customer would be the Asian public sector, for ESRs.</p>	<p>Page 134, Line 10-11 If Japanese PPP take an active role in promoting and implement ITS, the customer would be the Asian public sector, for ESRs.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 165, Line 22 - Page 166, Line 7 Interests within PPP2P, where Public Interest and Profit meets The difference of interests might turn into conflict between the public sector aiming at the public good and the private sector seeking profit but:</p> <ul style="list-style-type: none"> • While the profit motive drives the Japanese private sector, profits can be realized in a context that is consistent with the Asian public goal to provide ESRs. • Most Japanese private sector organizations recognize both the business opportunity and the Asian public benefits regarding ITS. 	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>

<p>Considering the estimated public benefits that will be achieved through ITS deployment, and if the Asian public sector can help clear the way for private sector success, then the Japanese private sector success can help advance public sector objectives for a safer and efficient transport infrastructure.</p> <ul style="list-style-type: none"> • Each purchase of Japanese ITS products or services, whether by Asian users or public sector, brings value to Asian society, with benefits extending beyond the purchaser. 		
<p>Page 166, Line 8-22</p> <p>The evidence from the ITS development strategy in Japan suggests that, in order to reap the benefits of ITS, it is necessary to involve the full range of actors in the PPP2P. In the case of ITS, the relative success is correlated to partnership implementation—in such a way that each has specific roles and responsibilities. In the case of Japanese PPP, collaboration occurs between the government and private enterprises in Japan. In the case of PPP2P, the Japanese PPP collaborates with an Asian government. The parties involved in PPP2P and their efforts can be summarized as follows:</p> <ul style="list-style-type: none"> • PPP between the Japanese public and Japanese private sectors • Collaboration between the government of Japan and the Asian state • Collaboration between Japanese private sector and the Asian state • In order to promote PPP2P, PPP2P projects require significantly high reliability in terms of both Japanese and Asian government commitment. 	<p>Page 134, Line 15-24</p> <p>The evidence from the ITS development strategy in Japan put forward that, it should involve all actors in the PPP2P. In the case of ITS, the relative success is correlated to partnership execution where each has specific responsibilities. For the Japanese PPP, cooperation occurs between the public and private sectors in Japan. In the case of PPP2P, the Japanese PPP collaborates with an Asian government as follows:</p> <ul style="list-style-type: none"> • PPP between the Japanese public and Japanese private sectors • Cooperation between the Japanese and the Asian state • Cooperation between Japanese private sector and the Asian state • In order to promote PPP2P, PPP2P projects require both Japanese and Asian government significant commitment. 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 166, Line 24-28</p> <p>In 1954, Japan began providing international assistance in the form of economic cooperation. Consisting mainly of loans, grants aid and technical cooperation, Japan has contributed to capacity development and to economic development in Asia, as a priority region, with infrastructure development such as improvement of transportation infrastructure as one of the priority tasks.</p>	<p>Page 135, Line 1-5</p> <p>JICA, in 1954, began providing international assistance in the form of economic cooperation. Consisting mainly of loans, grants aid and technical cooperation, Japan through JICA has contributed to capacity development and to economic development in Asia, as a priority region, with infrastructure development such as improvement of transportation infrastructure as one of the priority tasks²²⁸.</p>	<p>参考文献を加えて明確な表現にした修正のため、訂正を認める。</p>
<p>Page 167, Line 5-13</p> <p>Regarding ITS, Japan’s financial assistance to Asia could</p> <ul style="list-style-type: none"> • highlight ESRs projects as a development priority. • include road safety components in grants for health and programs. • promote the ITS-based ESRs. 	<p>Page 135, Line 10-17</p> <p>Regarding ITS, Japan’s financial assistance to Asia could</p> <ul style="list-style-type: none"> • highlight ESRs projects as a development prime importance. • require road safety modules for allowances • encourage ITS-based ESRs. • support research, programs and policies related to ITS. 	<p>明確な表現への修正のため、訂正を認める。</p>

<ul style="list-style-type: none"> • support research, programs and policies related to ITS. • make funding for transport infrastructure projects conditional on ITS implemented • If ITS components are invested in at the same time as road construction, it would be also possible to apply for further loans for ITS within the ESRs loans. 	<ul style="list-style-type: none"> • make financing for transport projects conditional to ITS implementation <p>provide, if ITS components are included in road construction, further loans for ITS should be made within the ESRs loans.</p>	
<p>Page 167, Line 15-22</p> <p>Lack of expertise in ITS in developing countries may be a result of:</p> <ul style="list-style-type: none"> • a perception that ITS is only for developed countries. • impression that ITS is a high-cost system deployed only in developed countries using the latest technology. <p>Some transport senior policymakers in developing countries are even unaware of or even misunderstand ITS. Policy makers in developing countries should know (more) about ITS benefits, recognize (and select) the ITS applications that could be deployed and provide the greatest return on investment, in terms of money saved and services.</p>	<p>Page 135, Line 19-26</p> <p>Lack of expertise in ITS in developing countries may be a result of:</p> <ul style="list-style-type: none"> • a perception that ITS is only for developed countries. • perception that ITS is a too costly system to be installed for developed countries and using the most sophisticated technology. <p>Some transport senior policymakers in developing countries are even unaware of or even misunderstand ITS. Policy makers in developing countries should know (more) about ITS benefits, recognize (and select) the ITS applications that could be deployed and offer return on investment, especially money saving and services.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 167, Line 23 - Page 168, Line 5</p> <p>Introducing ITS is a complex undertaking, and decision makers have to understand the prerequisites for deploying ITS before their decisions are made. Japan's PPP2P, through technical cooperation, could help such ITS endeavor. Deploying ITS requires a variety of knowledge and skills beyond those used in traditional construction of road and public transport infrastructure. Planners in developing countries should have both the traditional and the ITS skills and knowledge for an ITS-enabled transportation infrastructure. Indeed, having both sets of skills and knowledge makes it possible for planners to understand and handle the interaction between traditional and ITS-enabled transportation and to develop them together.</p> <p>Japan can not only contribute with the required ITS skills and knowledge, beyond those used in traditional construction of road and public transport infrastructure, but also can play the role of system integrator through PPP2P in Asia.</p>	<p>Page 135, Line 26 - Page 136, Line 10</p> <p>For the World Bank²³⁰, <i>"introducing ITS is a complex undertaking, and decision makers have to understand the prerequisites for deploying ITS before their decisions are made. Japan's PPP2P, through technical cooperation, could help such ITS endeavor. Deploying ITS requires a variety of knowledge and skills beyond those used in traditional construction of road and public transport infrastructure. Planners in developing countries should have both the traditional and the ITS skills and knowledge for an ITS-enabled transportation infrastructure. Indeed, having both sets of skills and knowledge makes it possible for planners to understand and handle the interaction between traditional and ITS-enabled transportation and to develop them together"</i>.</p> <p>Japan can not only contribute with the required ITS skills and knowledge, beyond conventional construction of public road and other transport infrastructures, but also can play the role of system integrator through PPP2P in Asia.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 168, Line 7-20</p> <p>Japanese public sector initiated and created a new ITS market for Japanese consumers who widely adopted it. ITS in Japan is expected to play a primary role in expanding and in creating new markets for the auto and communication-related industries. Japanese electronic</p>	<p>Page 136, Line 12-20</p> <p>Japanese public sector initiated and created a new ITS market for Japanese consumers who widely adopted it. ITS in Japan is expected to create new markets for the auto and communication-related sectors. Beside the already developed ITS applications (VICS,</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>equipment manufacturers seized on the strategic opportunity VICS program represented to become worldwide market leaders in the manufacture and sales of in-vehicle navigation devices. Beside the already developed ITS applications (VICS, ETC¹⁶⁸, car navigation), pre-crash safety systems are in the pipeline.</p> <p>Global competition and national business interest are the driving forces for Japanese engagement in ITS. Japan believes that ITS is an opportunity to advance its industrial and trade interests, both locally and globally. Japan state it wanted to use ITS as engine for next generation info-communication industries: the developments of ITS/Telematics-related sectors should create global markets for their products/services.</p>	<p>ETC²³¹, car navigation), pre-crash safety systems is in the pipeline. Global competition and national business interest are the driving forces for Japanese engagement in ITS. Japan believes that ITS is an opportunity to spread its technological and business interests, both locally and globally. Japan stated it wanted to use ITS as engine for next generation info-communication industries: the developments of ITS/Telematics-related sectors should create global markets for their products/services.</p>	
<p>Page 168, Line 24-27</p> <p>Japan could provide loan and/or grant aid in relation to necessary equipment and materials for the construction of transportation infrastructure: funds will go to the procurement of Japanese ITS products/services.</p>	<p>Page 136, Line 24-27</p> <p>Japan could provide loan and/or grant aid in relation to necessary equipment and materials for the construction of transportation infrastructure: funds will go to the procurement of Japanese ITS products/services²³².</p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 169, Line 14-15</p> <ul style="list-style-type: none"> Japanese funds, available for both the Japanese private sector and Asian public sector, e.g. through the use of Overseas Development Aid (ODA) 	<p>Page 137, Line 13-14</p> <ul style="list-style-type: none"> Japanese funds, available for both the Japanese private sector and Asian public sector, e.g. through the use of Overseas Development Aid (ODA) 	<p>綴り修正のため、訂正を認める。</p>
<p>Page 169, Line 18-19</p> <ul style="list-style-type: none"> Experiences in developed countries can serve as the basis for successful ITS deployment in developing countries. 	<p>Page 137, Line 17-18</p> <ul style="list-style-type: none"> “Experiences in developed countries can serve as the basis for successful ITS deployment in developing countries²³³” (www.worldbank.org). 	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。</p>
<p>Page 169, Line 20 - Page 170, Line 22</p> <p>From an Asian (Public sector) perspective, two immediate issues might appear:</p> <ul style="list-style-type: none"> Financial issue: the importance of investing in ITS may not be apparent in countries where finances are constrained. Partnership issue: institutional lack of cooperation between different ministries within an Asian government as it is usually the case about ITS <p>The Asian public sector can do the following:</p> <ul style="list-style-type: none"> Making ITS Part of Transport Policy for ESRs and thus a 	<p>Page 137, Line 19 - Page 138, Line 13</p> <p>From an Asian (Public sector) perspective, two immediate issues might appear:</p> <ul style="list-style-type: none"> Financial issue Partnership issue: institutional lack of cooperation between different ministries within an Asian government as it is usually the case about ITS <p>The Asian public sector can do the following:</p> <ul style="list-style-type: none"> Making ITS Part of Transport Policy for ESRs and thus a political priority. Deploying ITS through ESRs has many direct 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>political priority. Deploying ITS through ESRs in developing countries has many direct and indirect benefits for the country as a whole.</p> <ul style="list-style-type: none"> • Set appropriate road safety targets and establish national road safety plans to achieve them. • Ensure that road safety considerations are embedded in new projects and in the evaluation of transport policies and plans. <p>Japanese ITS contribution would be proposed as follows:</p> <ul style="list-style-type: none"> • identify a lead agency or create an ITS organization to guide the national ESRs effort. • assess the human and financial issues, policies and partnership settings. • prepare a national ITS ESRs strategy and plan of action. • possibly allocate financial and human resources to address the issues. • implement specific ITS actions to prevent road traffic crashes, minimize injuries and their consequences. <p>From a general perspective, as analyzed for ITS in Japan, the same apply to global ITS: there are a variety of institutional and technology prerequisites that need to be put in place for the successful introduction of ITS. Most of the challenges which transportation faces relate less to technology than to institutional innovative flexibility.</p> <p>Promoting ITS to become part of transport policy on the levels of projects locally and globally to build a consensus around ITS among PPP2P. The World Bank estimates that, if fatality rates per vehicle in poorer countries were reduced by 30% by 2020, more than 2.5 million lives could be saved, and 200 million injuries avoided. If nothing is done, WHO predicts that by 2030, road traffic injuries are predicted to rise from tenth place in 2002 to eighth place by 2030.</p>	<p>and indirect advantages for the country as a whole.</p> <p>Japanese ITS contribution would be proposed as follows:</p> <ul style="list-style-type: none"> • identify a lead agency or create an ITS organization to guide the national ESRs effort. • address the human, financial, policies and partnership requirements. • formulate a national ITS ESRs strategy combined with implementation plan. • assign human and financial resources. • prevent road traffic crashes and minimize injuries through selected ITS actions <p>From a general perspective, as analyzed for ITS in Japan, the same apply to global ITS: there are multiple institutional and technology requirements for successful introduction of ITS but transportation challenges are institutional not technological.</p> <p>ITS has to become part of safe transport policy globally to build a consensus around ITS among PPP2P. If nothing is done, WHO predicts that by 2030, road traffic injuries to rise eighth place by 2030.</p>	
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Chap VII New Industry

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 171, Line 5-9 Schumpeter¹⁶⁹ considers innovation as both creator and destroyer of entire industries, observing that innovation could lead to waves of “creative destruction”. In this regard, from his perspective (on government agencies as entrepreneurial agents), an entrepreneurial intervention from the public sector in certain industries could proceed with the introduction of innovation.</p>	<p>Page 139, Line 5-9 Schumpeter²³⁴ considers innovation as both creator and destroyer of entire industries, noting that innovation leads to “creative destruction”. In this regard, from his perspective (on government agencies as entrepreneurial agents), an entrepreneurial intervention from the public sector in certain industries could proceed with the introduction of innovation²³⁵.</p>	<p>参考文献を明示し、引用が明確になるように修正したため、訂正を認める。</p>
<p>Page 171, Line 19-24 Gerashchenko¹⁷¹ introduced the notion of the state as an entrepreneurial agency in the making and shaping of private sector’s markets. Gerschenkron suggests that government entrepreneurship is required as a substitute for a lack of entrepreneurial capabilities from the private sector. Government could carry out entrepreneurial functions in the stimulation of economic development by mobilizing and coordinating the use of industrial and financial resources to the benefit of private sector.</p>	<p>Page 139, Line 19-25 Gerschenkron²³⁷ introduced the notion of the government as an entrepreneurial agent in the creation of and influencing private sector’s markets. Gerschenkron suggests that government entrepreneurship is required as a substitute for an absence of entrepreneurial activities from the private sector. Gerschenkron²³⁸ believes that Government could bring out entrepreneurial functions as incentive for economic development by assembling and organizing the use of industrial and financial assets to the advantage of private sector.</p>	<p>参考文献を明示し、引用が明確になるように修正したため、訂正を認める。</p>
<p>Page 172, Line 3-16 <u>"Comprehensive Plan for ITS in Japan"</u>¹⁷²</p> <ul style="list-style-type: none"> • <i>It is expected that developments in such ITS-related sectors as automobile and high-tech industries will have significant ripple effects on the Japanese economy, for instance, for new business creation.</i> • <i>ITS is expected to grow into the core multimedia mobile communications technology with huge market potential in the 21st century. Hope runs high for future success of ITS-related businesses resulting from creation of a variety of applications, just as mobile communications systems have succeeded.</i> • <i>ITS has been promoted not only by Japan, but also by the U.S. and countries in Europe, with a considerable amount of resources being expended by these countries. In this respect, ITS brings a dynamic and intense <u>international</u> competition behind the scenes in the field of technological</i> 	<p>Page 140, Line 3-14 <u>"Comprehensive Plan for ITS in Japan"</u>²³⁹ (excerpt from www.itsforum.gr.jp)</p> <ul style="list-style-type: none"> • <i>It is expected that developments in ITS-related automobile and high-tech sectors will have substantial ripple effects on the Japanese economy for new business creation</i>²⁴⁰. • <i>ITS is expected to develop into the multimedia mobile communications technology with huge market potential in the 21st century, with success of ITS-related businesses resulting from creation of applications, just as mobile communications have succeeded</i>²⁴¹. • <i>ITS has been promoted by the U.S. and Europe, with considerable resources. In this respect, ITS brings a dynamic and intense <u>worldwide</u> competition in the technological development. Japan should seize this opportunity to take the lead in the global arena through ITS.</i>²⁴² 	<p>参考文献を明示し、引用が明確になるように修正したため、訂正を認める。</p>

<p><i>development and international standardization. Japan should seize this opportunity to take the lead in the international arena through ITS promotion</i></p>		
<p>Page 172, Line 17-31 <u>New IT Reform Strategy</u></p> <ul style="list-style-type: none"> • <i>Turning to industrial competitiveness, Japan internationally dominates in the technical areas of mobile communications and RFID tags, etc. It is now necessary to use industries where we already have a technical advantage, and at the same time further improve business efficiency to establish an upward growth cycle through IT-related industries that have the capability of creating new added-values. I</i> • <i>... in addition to the strength of our IT industries, Japan has some of the world's most advanced ultra high-speed broadband (utilizing optical fiber technology, etc.) IT infrastructure and this infrastructure shall now serve as a foundation for the development of our IT society.</i> • <i>It is necessary to promote reforms for industrial structures through the establishment of IT-based management that will serve to help maintain and strengthen our international industrial competitiveness in such a way as to create a state where, instead of struggling to catch up, Japan is rather leading the world.</i> 	<p>Page 140, Line 15-24 <u>New IT Reform Strategy</u>²⁴³ (excerpt from http://japan.kantei.go.jp/policy/it/ITstrategy2006.pdf)</p> <ul style="list-style-type: none"> • <i>Turning to industrial competitiveness, Japan internationally dominates in mobile communications and RFID tags, etc. It is necessary to use industries where we already have a technical advantage, for creating new added-values.</i> • <i>Japan has some of the world's most advanced IT infrastructure which shall serve for the development of our IT society.</i> • <i>It is necessary to reform industrial structures that will maintain and strengthen our international industrial competitiveness in such a way as to create a state where Japan is leading the world.</i> 	<p>参考文献を加えて冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 174, Line 11-13</p> <ul style="list-style-type: none"> • Beside the infrastructure dimension of ITS, the automotive industry is also involved in the vehicle aspect dimension of ITS, such as navigation and pre-crash systems. 	<p>Page 142, Line 8-9</p> <ul style="list-style-type: none"> • Beside the infrastructure aspect of ITS, in the vehicle aspect of ITS, the automobile industry made contributions such as pre-crash systems. 	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 174, Line 25 - Page 175, Line 2 Case studies of both ITS and Telematics reveal that there are a limited number of business models that have been economically viable success. Lessons learned from the deployment of ITS/Telematics indicate the following partnership models are among the most effective: VICS in Japan and OnStar in the US.</p>	<p>Page 142, Line 21-23 ITS and Telematics cases tell of limited successful business models. Lessons learned from the deployment of ITS/Telematics shows the following partnership models are successful: VICS in Japan and OnStar in the US.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 175, Line 6-10 ITS/Telematics encompasses players such as the communications industry, content providers and electronics equipment manufacturers in addition to the automotive industry. Other industries are likely to be involved as well as third party services suppliers in providing a range of commercial services. Third party private service providers</p>	<p>Page 143, Line 1-4 ITS/Telematics encompasses players such as the telecommunications, content and consumer electronics in addition to the automotive industries. Other industries are likely to be involved as well as 3rd party private services providers in supplying several commercial services to both drivers and passengers.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

will have access to vehicle drivers and passengers for service provision.		
<p>Page 175, Line 11-20</p> <p>All persons who move are potential ITS market targets; public transport users, drivers, passengers and even pedestrians can be concerned with ITS development. This results in potentially very large market for different industrial activities and services, mostly in telecommunications, computer, electronics and automotives domains. They intervene in all domains of ITS to offer services such as information, navigation and guidance systems, safe driving assistance systems, infrastructure managing assistance systems, e-ticketing and e-tolling systems, fleet and freight management assistance systems. Transactions such as processing of electronic payment for goods and services, downloading a movie, or providing travel information, present interesting new opportunities for business relationships and sales.</p>	<p>Page 143, Line 5-10</p> <p>For www.ertico.com, “all persons who move are potential ITS market targets; public transport users, drivers, passengers and even pedestrians can be concerned with ITS development. This results in potentially very large market for different industrial activities and services, mostly in telecommunications, computer, electronics and automotive domains.”²⁴⁴. They intervene in all domains of ITS to offer services”²⁴⁵ new business opportunities for building relationships and increasing sales.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 175, Line 21-28</p> <p>The vehicle manufacturers have a particular place in this group because they produce a final product, the vehicle. As primary stakeholder, the car makers may be offering a range of services to drivers/users. Additionally, because many of the applications require that the information be passed along a communications network, ITS will generate, as secondary stakeholder, leadership as well to the communications industry. Indeed, by enabling the acquisition of data from and the transmission of information to vehicles, ITS opens a wide array of business opportunities for additional services and products.</p>	<p>Page 143, Line 11-16</p> <p>The car makers have key role they deliver the final product, the vehicle. As primary stakeholder, the car makers may be offering a range of services to drivers/users. As secondary stakeholder, the communications industry would benefit from applications requiring related information to go through communications network. Indeed, by enabling the acquisition and transmission of information to vehicles, ITS opens new business opportunities for new services and new products.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 176, Line 2-5</p> <p>Japanese companies have increasingly been establishing in-house sections in charge of ITS/Telematics in order to handle business related to ITS/Telematics. ITS/Telematics offers a means of adding new functions and values to their products or improving the quality of the products themselves.</p>	<p>Page 143, Line 18-21</p> <p>Japanese companies have increasingly been establishing in-house sections in charge of ITS/Telematics in order to handle business related to ITS/Telematics. ITS/Telematics offers opportunities of developing new applications, values and quality to their services/products.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 176, Line 12-19</p> <p>Harvard’s Porter¹⁷³ describes an emerging industry as an industry without the normal set of rules established. Actors entering an emerging industry often face the dilemma of having to compete and cooperate with the other participants at the same time: “coopetition” is inevitable and takes place since everyone wants to ensure that they control the best position for the future while partnership on the other</p>	<p>Page 144, Line 1-7</p> <p>Harvard’s Porter²⁴⁶ describes an emerging industry as an industry without the normal set of rules established: “Actors entering an emerging industry often face the dilemma of having to compete and cooperate with the other participants at the same time: “coopetition” is inevitable and takes place since everyone wants to ensure that they control the best position for the future while partnership on the other</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を</p>

hand might arise since all the participants want to promote the new industry and its products. In such “coopetition” context, everyone benefits from a growth for the industry as a whole.	hand might arise since all the participants want to promote the new industry and its products. In such “coopetition” context, everyone benefits from a growth for the industry as a whole” ²⁴⁷ .	認める。
Page 177, Line 1-2 7.2.2 ITS-based (with PPP) study case: Japan’s Vehicle Information and Communication System (VICS)	Page 144, Line 15 7.2.2 ITS-based (with PPP) study case: Japan’s VICS	長い名称を省略名に変更したため、訂正を認める。
Page 177, Line 3-5 The study case analyzes the role of the Japanese public sector in introducing advanced technologies through ITS with the support and coordination of the ITS related industries (vehicle, telecom network, devices, services).	Page 144, Line 16-18 The study case analyzes Japanese public sector role in introducing advanced technologies through ITS with the support and coordination of the ITS related industries (vehicle, telecom network, devices, services).	明確な表現への修正のため、訂正を認める。
Page 177, Line 19-24 VICS has been in service in Japan since April 1996, and operates on highways and main roads throughout the country. The development of VICS began with a feasibility study concluded in 1994 that set out the basic ideas for the program, projections of usage, benefits and costs, and a description of the institutional approach to deployment. The feasibility study projected that most of all four-wheel vehicles would be equipped with VICS devices capable of real time route guidance.	Page 145, Line 4-6 VICS has been operating since April 1996 on highways and main roads throughout Japan. The VICS began with a feasibility study in 1994 that lay out the basics for the program, usage, benefits and costs, and institutional approach.	冗長な表現をなくした修正のため、訂正を認める。
Page 178, Line 2-13 The government was crucial in initiating the VICS program through the public-private partnership in the specifications of uniform communication protocols, and the development of a nationwide traffic digital database. This public-private partnership initiated by the public sector has been decisive in the success of VICS. The main reason behind the success of the VICS is the division of responsibilities between the public and private sectors. These sectors agreed upon what was for the most part a natural division of roles and tasks. In essence, VICS was organized through the cooperation of various tasks, as follows: Public sector • equipment on the road infrastructure • information collection (road operators and the police) • information processing (private bodies under government supervision).	Page 145, Line 8-19 The government was crucial in initiating the VICS program through the public-private partnership in the specifications of communication protocols, and the development of a countrywide traffic digital database. This public-private partnership initiated by the public sector has been decisive in the success of VICS. The main reason behind the success of the VICS is the division of responsibilities between the public and private sectors. These sectors decided the appropriate division of roles and tasks. In essence, VICS was organized through the management of various tasks, as follows: Public sector • equipment for road infrastructure • information collection (road operators and the police) • information processing (private bodies but under government supervision).	明確な表現への修正のため、訂正を認める。
Page 178, Line 17-25 Beside the strong public-private partnership factor, a second critical	Page 145, Line 23 - Page 146, Line 7 Beside the strong public-private partnership factor, a second key	明確な表現への修正のた

<p>success factor for VICS has been the nationwide installation of beacons along the roadside.</p> <p>The government assumed the technical and financial responsibility in implementing radio and optical beacons to provide two-way communication with the in-vehicle devices without requesting for financial compensation in order to boost private sector involvement in car navigation systems.</p> <p>In order to promote user acceptance, the public sector provided simultaneously traffic detection and surveillance information, channeled to the VICS center, and up-date traffic information (from the VICS center) to the vehicles.</p>	<p>success feature for VICS has been the nationwide roadside installation of beacons.</p> <p>The public sector assumed the technical and financial responsibility in implementing radio and optical beacons to offer 2-wayscommunication within-vehicle devices without requesting for financial compensation in order to boost private sector involvement in car navigation systems.</p> <p>In order to promote user acceptance, the public sector provided simultaneously traffic surveillance information, directed to the VICS center, and up-date traffic information (from the VICS center) to the vehicles.</p>	<p>め、訂正を認める。</p>
<p>Page 179, Line 8 - Page 180, Line 2</p> <p>They were respectively responsible for traffic control, highway administration and telecommunications. Compared to public-private partnerships, partnerships between public agencies have more constraints. Indeed, while businesses will not make initial arrangements for the projects where they do not see profits, initial partnering process between public agencies are often stimulated by political or other various external factors. Although the VICS partnership between public-private players was relatively smooth, there was some technological competition between these three public institutions regarding communication media.</p> <p>VICS makes use of three communication technologies: FM multiplex broadcasting, radio-waves and optical beacons to provide drivers with real time traffic information. The reason for multiple media usage is political; as vehicle communication systems R&D activities had been conducted independently by</p> <ul style="list-style-type: none"> • National Police Agency (NPA) with Advanced Mobile Traffic Information and Communication System (AMTICS). The NPA system integrated the optical beacon function with optical traffic sensors not only for information provision, but also for information acquisition. Indeed, optical beacons have a two-way communication function used by on-demand Dynamic Route Guidance (DRGS), part of Universal Traffic Management Systems (UTMS). • Ministry of Construction (MOC) with Road/Automobile Communication System (RACS). The MOC, responsible for road construction and traffic administration on motorways, intended to use radio beacons as a platform for extended services including, e.g., Electronic Toll Collection (ETC) system with Dedicated 	<p>Page 146, Line 15-27</p> <p>They were respectively responsible for traffic control, highway administration and telecommunications. In contrast to public-private partnerships, public agencies partnerships have more limitations as mostly motivated by political factors. Although the VICS partnership between public-private players was relatively smooth, there was some technological competition between these three public institutions regarding communication media.</p> <p>VICS makes use of three communication technologies: FM broadcasting, radio waves and optical beacons. The reason for 3 different media implementation is political: vehicle communication R&D had been initiated autonomously by</p> <ul style="list-style-type: none"> • National Police Agency (NPA) with Advanced Mobile Traffic Information and Communication System (AMTICS). • Ministry of Construction (MOC) with Road/Automobile Communication System (RACS). 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>Short Range Communication (DSRC) which has also a two-way communication.</p>		
<p>Page 180, Line 11-19 Because Police in Japan is legally responsible for traffic regulations and enforcement, the National Police Agency developed the digital database for traffic regulations containing restrictions on maneuvers such as turn prohibitions and u-turns. As traffic information provision is a public matter, competition has been applied: the VICS Center began online supply of source information to private information service. It was expected that the private sector will actively participate in this traffic information market. Indeed, Japan has private companies issuing quite detailed (large scaled) maps containing information concerning residents, offices, shops, etc., not unlike the case of road maps where the fundamental map is supplied by the public sector.</p>	<p>Page 147, Line 7-11 As traffic information is a public matter, the VICS Center began online supply of information to private service users. It was expected that the private sector will actively participate in this traffic information market. Indeed, Japan has many private companies issuing private maps containing localized information while the road maps are supplied by the public sector.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 180, Line 24 - Page 181, Line 8 Japan has been extremely successful in deploying a nationwide traveler information system capable of providing information for real time route guidance. There has been a consistent growth in the sales of car navigation systems. A critical success factor Japan has been scale economies and reasonable unit costs of manufacturing. If VICS had been not employed on a national scale, it was unlikely that has resulted the equipment manufacturers would have found it economically feasible to participate in the project. Indeed, among other reasons for such rapid popularization of VICS is large production of car navigation units that has resulted in price reductions. Although car navigation units are provided as an option for most new cars, there are more built-in car navigation units than those installed after purchase: it is gradually becoming standard automobile equipment in Japan.</p>	<p>Page 147, Line 15-17 A critical success factor in the sales of car navigation in Japan has been economy of scale which translated into price reductions. Although car navigation is optional, built-in car navigation for new cars is becoming standard vehicle equipment in Japan.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 181, Line 10-21 The Japanese deployment of VICS has used a public-private “partnership-business model”. The private sector was able to capture the willingness of the drivers to pay for equipment that can help save travel time by providing real time route guidance given traffic conditions on the network and by furnishing navigation information such as parking availability. The government collected contributions from the manufacturers of VICS in-vehicle equipment and infrastructure based on the level of affinity, investments and fees from participants in the VICS program.</p>	<p>Page 147, Line 19-24 VICS has used a public-private “partnership-business model”. The government collected contributions from the manufacturers of VICS in-vehicle equipment and infrastructure. Private sector contributions funded the operating cost of the VICS Center. The private sector was in charge of the marketing of the VICS initiative. VICS users pay both implicitly license fees to the VICS Center, including the on-board terminal price.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>Private sector contributions financed the operating cost of the VICS Center and the manufacture of in-vehicle devices. The private sector was also responsible for the development and marketing of the VICS initiative. VICS users implicitly pay license fees to the VICS Center, hidden in the price of on-board equipment.</p>		
<p>Page 181, Line 23 - Page 182, Line 6 Important to note, Japanese consumers have traditionally been early adopters of new technology-based products and services. Japan’s complex and congested road system has made these technologies particularly attractive to the driving public. The “partnership-business model” was predicated upon users in Japan being willing to purchase in-vehicle devices capable of delivering real time traffic information to the driver regarding the congested highway network in Japan and parking availability in the largest cities. As VICS was intended to facilitate smoother and safer movement of traffic on the Japanese roadway network, Japanese drivers have strong demand for a route guidance system using map presentation because of the nation’s complicated road system. The high levels of congestion have contributed as well to the market success.</p>	<p>Page 148 /Line 2-7 Important to note, for the World Bank, “Japanese consumers have traditionally been early adopters of new technology-based products and services. Japan’s complex and congested road system has made these technologies particularly attractive to the driving public”²⁴⁹. The “partnership-business model” was based upon drivers purchasing in-vehicle devices delivering real time congested traffic information and parking availability.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 184, Line 16-24 Under the leadership of GM’s CEO Richard Wagoner, General Motors developed an e-business strategy that focused on: 1-business-to-consumer (B2C) e-commerce, related to its online shopping service, called BuyPower. 2-business-to-business (B2B) e-commerce, online parts-buying enterprise called Covisint, By combining the first and second parts, General Motors believed it would have the ability to create a Web-based service whereby customers could purchase cars online, have them built to order, and delivered within days.</p>	<p>Page 150, Line 18-25 Under the leadership of Richard Wagoner CEO, GM developed an e-business strategy as follow: 1- B2C business-to-consumer e-commerce, related to its online shopping service, called BuyPower. 2- B2B business-to-business e-commerce, online parts-buying enterprise called Covisint. “By combining the first and second parts, General Motors believed it would have the ability to create a Web-based service whereby customers could purchase cars online, have them built to order, and delivered within days”²⁵⁰.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 185, Line 1-13 Post-Crash Notification System (PCNS) In a crash, the vehicle’s OnStar Telematics module that provides communications between the vehicle and OnStar Call Center, calls OnStar for help. Once a connection is successfully established, a data transmission exchange occurs between the vehicle’s Telematics module and OnStar Call Center. The crash information transmitted summarizes key sensor metrics: vehicle location; whether front and/or side airbags deployed; whether there were multiple impacts; whether there was a rollover (when specific rollover sensing is</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>

<p>available); as well as the impacts. Such critical information can allow subjective interpretations such as the probability of severe injuries, the resources required at the scene of the accident and the medical facility best-suited to treat the victim(s).</p> <p>OnStar “advisors” immediately communicate with the vehicle occupants via the established connection to gather additional information.</p>		
<p>Page 185, Line 16-23</p> <p>As GM could not build internally all the needed components for OnStar, alliances were needed. General Motors established a network of key partnerships with several companies across a number of industries. OnStar was founded as a collaborative venture among GM, EDS, Hughes and Delco. Each of the founding companies brought a specific area of expertise to the enterprise. GM brought vehicle production, distribution, sales, service, and financing system. EDS brought information management and customer service technologies; Hughes brought communications and satellite technology, and Delco vehicle hardware.</p>	<p>Page 151, Line 3-10</p> <p>As GM could not build internally all the needed components for OnStar, alliances were needed. General Motors established partnerships with a number of companies across different industries. OnStar was established as a joint venture among GM, EDS, Hughes and Delco: each contributing with a particular expertise to the initiative. GM initiative contributed with vehicle production, distribution, sales, service, and financing system. EDS contributed with customer information management and service technologies; Hughes brought telecommunications including satellite technology, and Delco vehicle hardware.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 185, Line 24-28</p> <p>This partnership strategy confirms Hax System Lock-in option: adoption of new services/products is affected by the presence/absence of complementary products. In the network economy, firms rarely act alone in creating new services. For Hax “<i>Do not play the game alone. Seek complementors, partners, and network effect...to create value</i>”</p>	<p>Page 151, Line 11-15</p> <p>This partnership strategy confirms Hax System Lock-in option: adoption of new services/products is “affected by the presence/absence of complementary products. In the network economy, firms rarely act alone in creating new services”²⁵¹. For Hax “<i>Do not play the game alone. Seek complementors, partners, and network effect...to create value</i>”</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。</p>
<p>Page 186, Line 1</p> <p>Vehicle-Medical sector Partnership</p>	<p>Page 151, Line 16</p> <p>Vehicle-Medical Sector Partnership</p>	<p>軽微なエディトリアル修正のため、訂正を認める。</p>
<p>Page 186, Line 5-17</p> <p>The stated objective of the ComCARE Alliance is “to encourage and facilitate cooperation across professional, jurisdictional, and geographic lines, seeking to break down the walls that separate these agencies and professions and limit their effectiveness. Our goal is to promote a coordinated approach to emergency services”¹⁷⁶. ComCARE and OnStar co-sponsored the National Mayday Readiness Initiative (NMRI)¹⁷⁷, supported by USDOT funds. ComCARE produced a consensus on crash data and communicated it</p>	<p>Page 151, Line 20-25</p> <p>The stated objective of the ComCARE Alliance is to promote coordinated approach to emergency services”²⁵³. ComCARE and OnStar co-sponsored the National Mayday Readiness Initiative (NMRI)²⁵⁴, supported by USDOT funds. ComCARE produced a consensus on crash data and communicated it to all the major US-based automobile companies in 2002.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>to all the major US-based automobile companies in 2002. OnStar said they would provide emergency data to response agencies, but advocated a standardization of the data set that would be used to move information from them to emergency agencies. OnStar asked ComCARE to facilitate that process: over 20 public and private organizations participated and developing a standardized Vehicular Emergency Data Set (in XML) for use in vehicle emergencies.</p>		
<p>Page 186, Line 18 Vehicle-Vehicle makers Cooperation</p>	<p>Page 151, Line 26 Vehicle-Vehicle Makers Cooperation</p>	<p>軽微なエディトリアル修正のため、訂正を認める。</p>
<p>Page 186, Line 19-30 OnStar became available only in General Motors vehicles. After intense internal strategy discussion, GM decided to offer OnStar to some of its competitors by arguing that OnStar could turn competitors into partners, to the benefit of both, and keep competitive information secure. GM would realize significant economies of scale by signing up additional customers. Rivals would get a way to add customer value and enhance brand loyalty without having to take an enormous hit to their own bottom lines by developing their own systems. It created a unique partnership between the OnStar and the existing parent company, GM, which allows OnStar unprecedented autonomy to reach out to competitors and broaden its customer base. Today, OnStar provides its service to Audi, Isuzu, Acura, Volkswagen, and Subaru cars, in addition to GM's own lines. General Motors also signed deals with Honda and Toyota.</p>	<p>Page 151, Line 27 - Page 152, Line 7 OnStar became available only in General Motors vehicles. After intense internal strategy discussion, GM decided to offer OnStar to some of its competitors by arguing that “OnStar could turn competitors into partners, to the benefit of both, and keep competitive information secure. Rivals would get a way to add customer value and enhance brand loyalty without developing their own systems. It allows OnStar unprecedented autonomy to reach out to competitors and broaden its customer base. Today, OnStar provides its service to Audi, Isuzu, Acura, Volkswagen, and Subaru cars, in addition to GM's own lines”²⁵⁵. General Motors also signed deals with Honda and Toyota.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 187, Line 2-15 As the first system of its kind to be offered, the implementation of postcrash application provides OnStar and GM with a competitive advantage and as powerful differentiator in marketplace. It results from extensive knowledge of telematics, vehicle crash dynamics, electronics systems, and human safety research developed over years. This multi-disciplinary expertise of the Post-Crash Safety (PCS) development team coupled with aggressive business strategies allowed leadership in this emerging telematics industry. At the announcement by General Motors and OnStar of their decision to deploy Post-Crash Safety (PCS) capability, Dr. Jeffrey Runge¹⁷⁸, a prominent emergency physician expressed “I’d like to express my appreciation to GM for taking this step. I look forward to the day</p>	<p>Page 152, Line 9-18 As the first in in the market, the post-crash application offers OnStar and GM a competitive advantage and differentiator. It delivers extensive knowledge of telematics, vehicle crash, electronics systems, and safety trough research developed over years. This multi-disciplinary know -how coupled with business strategies allowed leadership in this emerging telematics industry. When General Motors and OnStar announced the decision to install Post-Crash Safety (PCS) capability, Dr. Jeffrey Runge²⁵⁶, a prominent emergency physician expressed “I’d like to express my appreciation to GM for taking this step. We need someone to step forward and demonstrate that it can be done. Thank you, GM, for taking the industry lead.”</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p><i>when all cars are equipped with devices that give responders the right information – at the right time – to save lives. But before we can get this technology into all cars, we need someone to step forward and demonstrate that it can be done. Thank you, GM, for taking the industry lead.”</i></p>		
<p>Page 187, Line 17-22 According to a survey¹⁷⁹, 79 percent of OnStar customers said, “One of my biggest concerns is having an accident on the road and not being able to get help,” and 86 percent said, “OnStar gives me ‘peace of mind’ that everything will be okay if my family has a problem while on the road.” The same survey also indicated that 85 percent of OnStar customers felt that “the most important function of OnStar is the automatic notification of emergency personnel if the airbags go off.”</p>	<p>Page 152, Line 20-21 According to a survey²⁵⁷, 86 percent of customers said, “OnStar gives me ‘peace of mind’ that everything will be okay if my family has a problem while on the road.”</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 187, Line 23-26 OnStar enabled GM to establish a direct link with customers. and helped further strengthen interactions between customers and car makers. With more than 20 million customer interactions for its subscriber base of more than 2 million, OnStar provided GM with a better understanding of customer safety needs.</p>	<p>Page 152, Line 22-23 OnStar facilitated GM connect to customers by providing a better understanding of GM customer needs, with safety services in order to build customer loyalty, get customer feedback for potential marketing opportunities and for better designing its future vehicles to meet customer needs²⁵⁸.</p>	<p>参考文献を明示し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 187, Line 26 - Page 188, Line 2 GM had aligned itself closer to its customers while providing them valuable safety services. Such direct connections with customers had the potential to deliver long-term benefits in building customer loyalty, getting customer feedback, and setting up potential marketing opportunities. Additionally, GM intends to use the customer insight it received from OnStar services to better design its future vehicles to meet customer needs.</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 188, Line 16-17 4. Strategies^{xxxii} including the position of the company in the market related to suppliers, partners and competitors.</p>	<p>Page 153, Line 12-13 Strategies^{xxvii} comprising the company positioning in the market related to suppliers, customers, competitors and partners.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 188, Line 18-20 The challenge is how to create Business Models which make the emerging industry profitable for most players while making the revenue models and sales affordable for users/consumers.</p>	<p>Page 153, Line 14-15 The challenge is new profitable Business Models for the emerging industry while having both value and cost affordable for users/consumers.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 188, Line 26 - Page 189, Line 6 As integration of vehicle and telecommunications platforms proceed,</p>	<p>Page 153, Line 21-27 As integration of vehicle and telecommunications systems proceed,</p>	<p>明確な表現へ</p>

<p>strategies for bundling ITS information, services, and equipment increase in complexity and so will correspond approaches to business modeling. ITS/Telematics firms have no established business models, just services and equipment, some of which are free and some not. Many key variables within the various business models remain unknown: there is no successful Business Models (except VICS and OnStar) because of lack of information on customer types, products/services and pricing.</p>	<p>strategies for creating ITS/Telematics information, services, and hardware rise in complexity and so accordingly business modeling. ITS/Telematics firms have no established business models, just services and equipment, some of which are free and some not. Many components within the many business models remain indefinite: there is no successful Business Models (except VICS and OnStar) because of lack of information on customer types, products/services and pricing.</p>	<p>の修正のため、訂正を認める。</p>
<p>Page 189, Line 18 - Page 190, Line 1 When there is a market for ITS services, it means that the customer should be willing to use/pay for those services, but the customers do not yet see clearly the ITS benefits, and therefore less the customer is willing to use/pay for ITS services.</p>	<p>Page 154, Line 11-13 A market for ITS services indicate that customers are willing to use and pay for those services. If the customers do not yet understand the ITS benefits, the customer will be not willing to use and pay for ITS services.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 190, Line 14-17 These systems include display, computing functions, GPS and road map software. Thanks to VICS, Japan has been successful in deploying a nationwide traveler information system capable of providing information for real time route guidance through this first generation of On-Board Units (OBUs).</p>	<p>Page 155, Line 7 These systems include display, computing functions, GPS and road map software.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 191, Line 13-16 Japanese emerging ITS industry hopes run high for additional future success of ITS/Telematics-related businesses resulting from the creation of a variety of applications initiated by VICS and associated car navigation units, just as multimedia mobile phones have succeeded to be a platform for applications such as i-mode.</p>	<p>Page 156, Line 1-4 Japanese emerging ITS industry hopes run high for ITS/Telematics-related businesses resulting from the creation applications initiated by VICS and associated car navigation units, just as multimedia mobile phones have succeeded to be a platform for applications such as i-mode.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 193, Line 1-2 Figure 7.7: Dedicated Short Range Communication (DSRC) characteristics in Japan</p>	<p>Page 157, Line 12-13 Figure 7.5: Dedicated Short Range Communication (DSRC) characteristics in Japan</p>	<p>図番号のケアレスミス修正のため、訂正を認める。</p>
<p>Page 193, Line 9-10 Transactions such as processing of electronic payment for purchases of goods and services present additional business opportunities.</p>	<p>Page 158, Line 6-7 ITS is to offer services²⁶⁰ new business opportunities for building relationships and increasing sales.</p>	<p>参考文献を明示し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 194, Line 5-6</p> <ul style="list-style-type: none"> Industry focus on technological development, driven by the latest technological innovations simply and offering new technologies because it is possible to do so. 	<p>Page 158, Line 15-16</p> <ul style="list-style-type: none"> Industry focus on technological development, driven by the latest technological innovations, simply because it is possible to do so. 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>Page 194, Line 9-10</p> <ul style="list-style-type: none"> User approach related to technology: users tend to adopt technologies at a different rate, based on technological acceptance: 	<p>Page 158, Line 19-20</p> <ul style="list-style-type: none"> User approach related to technology: users tend to adopt technologies at a different rate, based on technological acceptance²⁶¹: 	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 194, Line 18-23</p> <p><i>ITS has been introduced to display “a clear example of an advanced info-communications society to the Japanese people, through road traffic/transportation system being closely related to their daily lives. Thus, ITS is expected to play a leading role in creating an advanced info-communications society where every citizen is ensured of leading a happy life through use of state-of-the-art info-communications technologies”.</i></p>	<p>Page 159, Line 3-6</p> <p><i>ITS has been introduced as “a clear application of a Japanese advanced info-communications society, being closely related to people daily lives where every citizen is ensured of leading a happy life through use of state-of-the-art info-communications technologies”²⁶².</i></p>	<p>参考文献を明示し、冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 195, Line 12-26</p> <p><i>When considering information technology, it’s easy to remain focused on advanced technologies rather than the people who need to use these technologies. We believe, however, that it is essential to formulate IT policies in terms of IT users and people. It is also preferable that IT technologies become infrastructures that users can utilize forgetting these technologies are even there—much like air and water. In other words, IT technologies should exist in such a way that people will experience convenience and feel their outstanding effects in all areas of their lives. Japan has achieved remarkable results in catching up with the world by actively implementing IT-related investment with the promotion of IT as a one of the countries major objectives.</i></p> <p><i>While the results from the supplier side are seen as being outstanding, when it comes to IT user satisfaction, our results were not necessarily seen as being sufficient.</i></p> <p><i>We now are embarking on the final stage of the IT revolution in which we will see the creation of a society where people are able to truly enjoy the benefits of these new information technologies, and during this final stage, it will be the perspective of IT users that shall remain paramount.</i></p>	<p>Page 159, Line 20-26</p> <p><i>We believe that it is essential to formulate IT policies in terms of IT users and people. It is also preferable that IT technologies that users can utilize forgetting these technologies are even there—much like air and water in a way that people will experience convenience in their lives.</i></p> <p><i>We will see the creation of a society where people are able to truly enjoy the benefits of these new information technologies, with the perspective of IT users that shall remain paramount.</i></p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 196, Line 1-2</p> <p><u>US ITS America’ National ITS Program Plan developed a series of eight themes, which include a “Human Factors Theme”</u></p>	<p>Page 160, Line 1-2</p> <p><u>US ITS America’ National ITS Program Plan developed a series of eight themes, which include a “Human Factors Theme” (excerpt²⁶⁴)</u></p>	<p>参考文献を明示したため、訂正を認める。</p>
<p>Page 196, Line 12-13</p>	<p>Page 160, Line 11-12</p>	<p>参考文献を明</p>

<p><i>Understanding human factors is a fundamental key to the effective delivery of the benefits of ITS.</i></p>	<p><i>Understanding human factors is a fundamental key to the effective delivery of the benefits of ITS²⁶⁵.</i></p>	<p>示したため、訂正を認める。</p>
<p>Page 196, Line 14-17</p> <ul style="list-style-type: none"> Post-crash notification systems are a significant advancement in the field of vehicle safety technologies but most importantly it responds to customer concerns for enhanced vehicle safety and is supported by leading experts in the emergency and medical fields. 	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 196, Line 19-20</p> <p>In this approach, all persons who want to move are considered as potential customers: drivers, passengers and pedestrians.</p>	<p>Page 160, Line 14-15</p> <p>In this approach, all moving persons are considered as potential customers: drivers, passengers and pedestrians²⁶⁶.</p>	<p>参考文献を明示し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 196, Line 23-24</p> <p>In Telematics industry, there are several actors – e.g. auto makers and telecom players- that all fight for the position of owning the customer.</p>	<p>Page 160, Line 18-19</p> <p>In Telematics industry, there are several actors – e.g. auto makers and telecom players- all aiming at owning the customer.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 197, Line 16-20</p> <p>In a CRM context for a company, the only people able to evaluate the quality of the company’s goods and services are the customers who buy them. Thus, the continuous improvement of the services through constant user feedback, within VRM and CRM, is vital in the telematics industry.</p>	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 197, Line 23-25</p> <p>A better consideration of human factors will facilitate the rollout of safe and usable ITS/Telematics products and services for all users.</p>	<p>Page 161, Line 11-12</p> <p>A better consideration of human factors will enable safe and user-friendly ITS/Telematics services and products for all.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 198, Line 5-30</p> <ul style="list-style-type: none"> Pricing (Incentives) In cases where users buy equipment or pay charges to use ITS services, incentives can be an effective sales policy. Government could give subsidies or other incentives to consumers who purchase ITS products and services. Public sector could encourage deployment and adoption of ITS technologies via direct subsidies or by reducing taxes on vehicles that carry ITS products. Economy of scale Increased equipment and services figures lead to economies of scale 	<p>Page 161, Line 17 - Page 162, Line 7</p> <ul style="list-style-type: none"> Pricing Public sector could encourage adoption of ITS via subsidies on vehicles that carry ITS products. Economy of scale Economies of scale decrease service and equipment prices per unit which in return increase sales figures. A key success factor in Japan has been reasonable costs of manufacturing through scale economies. Indeed, such rapid popularization of VICS is due to price decreases resulting from economy of scale of large production of car 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

<p>in production, pushing the service and equipment prices down. Falling prices increase sales figures again, creating a virtuous cycle. A critical success factor in Japan has been scale economies and reasonable unit costs of manufacturing. If VICS had been not employed on a national scale, it was unlikely that the equipment manufacturers would have found it economically feasible to participate in the project. Indeed, among other reasons for such rapid popularization of VICS is large production of car navigation units that has resulted in price decreases economies of scale.</p> <ul style="list-style-type: none"> • Increasing appeal through packaged applications Some services which are not readily accepted as stand alone would be more acceptable in combination with other services. For example, combining a service with existing car navigation systems can make it quite easy to expand the user base. This approach of bundling services and applications rather than keeping them in isolation can spread them. A typical example is Japan's VICS (Vehicle Information and Communication System): VICS information became attractive when combined with car navigation systems. With OnStar, the ability to make calls for emergency help (with automatic location) has been strongly identified in market research as services the public is willing to pay for as consumers. And given continued consumer interest in safety, other services have been added as commercial ones. 	<p>navigation units price decreases.</p> <ul style="list-style-type: none"> • Increasing appeal through packaged applications Services offered as stand -alone might be more acceptable bundled with other services. For example, linking a service with car navigation can expand the user base. This bundling of services and applications rather than keeping isolated can spread them. A typical example is Japan's VICS information which became attractive when combined with car navigation. With Onstar, along the ability to make calls for emergency help, given continued consumer interest in safety, other services have been added as commercial ones. 	
<p>Page 199, Line 13-19</p> <ul style="list-style-type: none"> • Products and services are designed to provide utmost sophistication to the Japanese customer. This technology trend is confirmed by IT New Reform Strategy¹⁸⁴: <i>Both the tough and uncompromising nature of Japanese consumers and the uncompromising drive to perfection of Japanese industry, which has itself been diligently trying to live up to customer expectations, have together nurtured Japan's strong domestic industries in a variety of areas—from IT to materials, automobiles, and appliances.</i> 	<p>Page 162, Line 20-31</p> <p>Products and services are designed to provide utmost sophistication to the Japanese customer. This technology trend is confirmed by IT New Reform Strategy Society (IT Strategic Headquarters, 2006)²⁶⁹: <i>“Both the tough and uncompromising nature of Japanese consumers and the uncompromising drive to perfection of Japanese industry, which has itself been diligently trying to live up to customer expectations, have together nurtured Japan's strong domestic industries in a variety of areas—from IT to materials, automobiles, and appliances”.</i></p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。</p>
<p>Page 209, Line 11 - Page 210, Line 2</p> <p>For Fukushima¹⁸⁹, the government economic policies, business models and leadership types that served Japan so well during the postwar catch-up phase through the 1980s have become liabilities for Japan in the post-Cold War world of the 1990s and the 21st century”. Further, to regain its competitiveness, Japan needs to make major changes to cope effectively with the forces of globalization. Among</p>	<p>Page 173, Line 8-12</p> <p>For Fukushima (Korn Ferry Asia)²⁷⁴, “the government economic policies and leadership types that served Japan so well during the postwar catch-up phase through the 1980s have become liabilities for Japan in the post-Cold War world of the 1990s and the 21st century. Further, to regain its competitiveness, Japan needs a new leadership type embracing change, diversity and innovation”.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、冗長な表現をなくし</p>

<p>the central changes needed is a new leadership type embracing change, diversity and innovation that might best be described as a “global change agent.” Therefore, companies need someone with creative problem-solving ability, multilingual and multicultural skills, and a willingness and sensitivity to listen and learn from the diversity in the marketplace. At the same time, a successful global leader needs to be willing to take risks to challenge the status quo</p>		<p>た修正のため、訂正を認める。</p>
<p>Page 210, Line 3-19 For Fukushima¹⁹⁰, some attributes of Japanese executives – e.g., lack of entrepreneurial spirit, risk averseness, and slow decision-making – can obviously impede the ability of Japanese executives to be effective globally. When an executive works globally, he/she encounters new and unknown situations every day. The individual is usually hired to solve problems that he/she has never experienced before. To be successful as a global executive, the executive needs to be able to manage diversity in people, rules and regulations, customs, and protocol. For Fukushima¹⁹¹, there is a common set of characteristics for global leaders, as change agents. These qualities include: (1) diversity management, (2) commitment to results, (3) accountability, (4) challenging/entrepreneurial spirit, (5) positive (can-do) attitude, (6) risk-taking, (7) humility to learn different values, and (8) uncompromising integrity.</p>	<p>Page 173, Line 12-24 For Fukushima²⁷⁵, “some attributes of Japanese executives – e.g., lack of entrepreneurial spirit, risk averseness, and slow decision-making – can obviously impede the ability of Japanese executives to be effective globally”. For Fukushima²⁷⁶, “there is a common set of characteristics for global leaders such as: (1) diversity management, (2) commitment to results, (3) accountability, (4) challenging/entrepreneurial spirit, (5) positive (can-do) attitude, (6) risk-taking, (7) humility to learn different values, and (8) uncompromising integrity”.</p>	<p>引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 210, Line 20-22 Most of the challenges which ITS faces relate to creating new and global business opportunities but more importantly to the need to change and update existing management, from a local-oriented attitude to a global vision.</p>	<p>Page 173, Line 26-27 ITS challenges relate to creating new global business opportunities but also to the need to change management, from a local-oriented attitude to a global vision.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 211, Line 11-21 Christensen contends that a product which moves to the higher end of the market creates opportunities for disruptive technologies to “attack from below” and occupy the lower end of the traditional market. As the new technology itself improves, it may occupy that an ever-growing share of the market. Once the technological innovation reaches from the early to late majority of users, it begins to compete with the established product in its traditional market.</p>	<p>Page 174, Line 12-21 Christensen contends that a product which moves to the higher end of the market creates opportunities for disruptive technologies to “attack from below” and conquer the lower segment of the existing market. For Christensen,” as the new technology itself advances, it will occupy -growing share of the market. Once it reaches the majority of users, it begins to compete with the established product in its existing market”²⁷⁸.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>

<p>MIT's Utterback¹⁹³ adds the concept of “attack from above” and contends that by emphasizing only “attack from below”, Christensen ignores other patterns of disruptive technological innovation, which may be of equal or greater importance. Utterback describes digital cameras as an “attack from above”, a more expensive technology, and as a counter-example to Christensen’s theory.</p>	<p>MIT's Utterback²⁷⁹ complements the concept of “attack from above” in addition to “attack from below”, which may be of equal or more important. Utterback describes digital cameras as an “attack from above”, a more expensive technology, and as a counter-example to Christensen’s “attack from below”.</p>	<p>め、訂正を認める。</p>
<p>Page 212, Line 1-15 Christensen asked why did so many Japanese companies that were once considered the best run in the world stumble so quickly? The answer is that their innovations fell victim to disruptive technologies. Nearly all of the technologies that drove Japan's business growth through the 1960s and 1970s were disruptive relative to the dominant American and European manufacturers. But based on Christensen’s theory, disruptive technologies also set their own trap^{xxxiv}: these very firms are now stuck at the high end of their own markets^{xxxv}. Their best customers are now the most sophisticated and demanding ones. For Christensen, the American economy has soared because the United States, unlike Japan, has been able to repeat the cycle of disruption. When U.S. industry leaders become stuck at the top of their markets, employees leave, pick up venture capital on the way out, and start new disruptive companies of their own. In Japan, however, the story is different. Its leading companies played the disruptive game once but then exhausted their growth options at the high end of their markets. Japan's industrial structure has made it difficult to start the new companies that create disruptive growth.</p>	<p>Page 175, Line 1-10 Christensen asked “why did so many Japanese companies that were once considered the best run in the world stumble so quickly”. The answer is nearly all of the technologies that drove Japan's business growth through the 1960s and 1970s were disruptive relative to the dominant American and European industries. But their best customers are now the most sophisticated and demanding ones. For Christensen, “the American economy has soared because the United States, unlike Japan, has been able to repeat the cycle of disruption. When U.S. industry leaders become stuck at the top of their markets, employees leave, pick up venture capital on the way out, and start new disruptive companies of their own. In Japan, however, the story is different”.</p>	<p>引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 212, Line 18-24 Christensen illustrates the case of Toyota who attacked the lowest tiers of the North American automobile market in the 1960s with its Corona model. The cars were simple and reliable that they became second cars. Toyota encountered competition from other Japanese companies such as Nissan and Honda. To maintain its profit margins, Toyota then introduced models targeted at more demanding consumers. Honda and Nissan have followed Toyota. Now, these car makers are stuck at the high end of their own markets.</p>	<p>Page 175, Line 13-19 Christensen illustrates the case of Toyota²⁸¹: “Toyota attacked the lowest tiers of the North American automobile market in the 1960s with its Corona model. The cars were simple and reliable that they became second cars. Toyota encountered competition from other Japanese companies such as Nissan and Honda. To maintain its profit margins, Toyota then introduced models targeted at more demanding consumers. Honda and Nissan have followed Toyota. Now, these car makers are stuck at the high end of their own markets”.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。</p>
<p>Page 212, Footnote ^{xxxiv}Christensen calls this trap “the innovator dilemma” ^{xxxv}The macro-economic parallel is Japan stucked at the high end of its developmental phase</p>	<p>削除</p>	<p>対象となる本文が削除されたため、訂正を認める。</p>

<p>Page 213, Line 4-6 Much of what the public sector does in relation to ITS can have a direct and profound effect on industry. ITS industry will mature when private players have established successful business models.</p>	<p>Page 175, Line 26 - Page 176, Line 1 What the public sector does (or doesn't) in connection to ITS strongly influence several industries (Transport, Car, Telecom...) structure and related business models. Emerging ITS industry will mature when private players have established successful business models.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 213, Line 21-25 In order to globalize their ITS products and services, Japanese private sector needs not only to carry out organizational reforms in order to increase their competitiveness but also to improve their global business management and leadership. These efforts for reforms are also essential for Japanese companies to participate and succeed in Asia through PPP2Ps.</p>	<p>Page 176, Line 16-19 In order to globalize their ITS products and services, Japanese private sector needs not only to carry out organizational reforms in order to increase their competitiveness but also to improve their global business management and leadership, also essential for Japanese companies to succeed in Asia through PPP2Ps.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>

Chap VIII Conclusion

訂正前	訂正後	訂正理由と内容・訂正を認めた理由
<p>Page 215, Line 5-11 Japan's population is forecast to decrease rapidly. In the mid twenty-first century, Japan's population will be about half its current size, and one-third of the population will be over 65 years old. Consecutively, it is expected that the labor force will decrease and it is likely that Japan's potential rate of economic growth will decline in the early twenty-first century unless there is a large increase in productivity. Two major factors to increase productivity are the (i) transfer of resources from low- to high-productivity sectors in the economy and (ii) advance in technologies.</p>	<p>Page 177, Line 5-11 Japan's population is forecast to decrease rapidly. Consecutively, the labor force would also decrease as well. It might be that Japan's population ratio might be connected to economic growth ratio which might further decline unless there is a productivity increase. Two major factors to increase productivity would be the (i) shifting assets from low- into high level productive sectors to shift into a knowledge economy and (ii) advance in technologies.</p>	<p>冗長な表現を削除し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 216, Line 6-7</p> <ul style="list-style-type: none"> • "e-Japan Strategy" (2001) advocates development of Japan into the world's most advanced Info-telecom society. 	<p>Page 178, Line 5-6</p> <ul style="list-style-type: none"> • "e-Japan Strategy" (2001) advocates Japan as the world's advanced Info-telecom society. 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 216, Line 10-11</p> <ul style="list-style-type: none"> • "IT New Reform Strategy" (2006) aims at the realization of the Ubiquitous Networking Society (UNS)^{xxxvi}. 	<p>Page 178, 9-10</p> <ul style="list-style-type: none"> • "IT New Reform Strategy" (2006) aims at the realization of the Ubiquitous Networking Society (UNS). 	<p>冗長な脚注の削除のため、訂正を認める。</p>
<p>Page 216, Line 13-25 In Japan, Intelligent Transport System has been defined as a comprehensive info-telecommunications system dealing with transportation.</p> <ul style="list-style-type: none"> • The 1995 "Guidelines" defined ITS as indispensable for promoting the creation of an advanced Info-telecom society". • For the "1996 Comprehensive Plan for ITS in Japan", ITS is considered to play an important role in creating "an advanced Info-telecom society" and which later became "the Ubiquitous Society". • In 1999, the Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that ITS would be a major driving force for the Ubiquitous Society. • One of the projects of u-Japan plan is ITS implementation. In this perspective, ITS is expected to play in Japan an important 	<p>Page 178, Line 12-23 In Japan, Intelligent Transport System has been defined as "a comprehensive info-telecommunications system dealing with transportation"²⁸⁴.</p> <ul style="list-style-type: none"> • The 1995 "Guidelines" defined ITS as "indispensable for the creation of an advanced Info-telecom society"²⁸⁵. • For the "1996 Comprehensive Plan for ITS in Japan", ITS is considered to support the creation of "an advanced Info-telecom society" and which later became "the Ubiquitous Society". • In 1999, the Telecommunications Technology Council (TTC) mentioned in "Info-communications Systems of ITS" report that "ITS would be a major driving force for the Ubiquitous Society"²⁸⁶. • One of the projects²⁸⁷ of u-Japan plan is ITS implementation. In this perspective, ITS is expected to contribute to an Ubiquitous 	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、明確な表現への修正のため、訂正を認める。</p>

contribution in realizing an Ubiquitous Society.	Society.	
<p>Page 216, Footnote ^{xxxvi}UNS is officially defined as infrastructure that can easily connect to networks that anyone can use at anytime from anywhere for any purpose and that has no digital divide</p>	削除	冗長な記述の削除と認められるため、訂正を認める。
<p>Page 217, Line 2-15 In July 1996, five government bodies¹⁹⁹ compiled a "Comprehensive Plan for ITS in Japan²⁰⁰", a remarkable visionary policy statement, presenting a long-term ITS vision and including the main concepts for ITS development, as well as its deployment plans as related to ITS objectives. The following definition of ITS has shaped the way ITS has been conceived, designed and implemented: <i>1.ITS is defined as a comprehensive info-communications system dealing transportation;</i> <i>2.ITS can display a clear example of an advanced info-communications society project;</i> <i>3.ITS brings a dynamic and intense international competition behind the scenes in the field of technological development. Japan should seize this opportunity to take the lead in the international arena through ITS promotion;</i> <i>4.ITS-related sectors as automobile and high-tech industries will have significant ripple effects on the Japanese economy, for instance, for new business creation</i></p>	<p>Page 178, Line 27 - Page 179 Line 10 In July 1996, 5 government bodies²⁸⁹ bring together a "Comprehensive Plan for ITS in Japan²⁹⁰", a remarkable visionary policy statement, presenting a long-term ITS vision and including the main concepts for ITS development, as well as its deployment plans as related to ITS objectives. The following definition of ITS has shaped the way ITS has been conceived, designed and implemented²⁹¹: <i>1.ITS is defined as "a comprehensive info-communications system dealing transportation";</i> <i>2.ITS can "display a clear example of an advanced info-communications society project";</i> <i>3.ITS brings "a dynamic and intense international competition in the field of technological development. Japan should seize this opportunity to take the lead";</i> <i>4.ITS-related sectors such as "automobile and high-tech industries will have significant ripple effects on the Japanese economy for new business creation".</i></p>	参考文献を明示し、引用符を挿入して引用箇所を明確化し、明確な表現への修正のため、訂正を認める。
<p>Page 217, Line 27-28 <i>4.ITS-related sectors as automobile and high-tech industries for new business creation:</i></p>	<p>Page 178, Line 22-23 <i>4."ITS-related sectors as automobile and high-tech industries for new business creation":</i></p>	引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。
<p>Page 218, Line 5-12 It has been widely acknowledged that the Japanese government has always played a very active role in Japan's economic development. Sheridan²⁰¹ states that the role of the Japanese government is quite unusual by Western standards in that "it gives Japan an unusual capacity to think strategically and at times to make deliberate changes of direction as a nation society". Sheridan's statement fits to the past, current and future telecom policy, in particular when it comes to ITS. To add to Sheridan's perspective, the role of the state in Japan has</p>	<p>Page 180, Line 3-8 Historically, Japanese government always plays an essential and vital role in Japan's economic development. Sheridan²⁹² states "Japanese government think strategically and make deliberate changes of direction as a nation society". Sheridan's statement fits to the past, current and future telecom policy, in particular when it comes to ITS. To add to Sheridan's perspective, the role of the Japanese state in has always been in the context of technological catch-up, until the end of last century.</p>	引用符を挿入して引用箇所を明確化し、冗長な表現をなくした修正のため、訂正を認める。

always been in the context of technological catch-up, until the end of last century..		
Page 218, Line 20-21 Aoki ²⁰² agrees that Japan, as pioneering economy, represents most promisingly the rise of the entrepreneurial state.	Page 180, Line 15-16 Aoki ²⁹³ agrees that Japan, as pioneering economy, represents the upsurge of the entrepreneurial state.	冗長な表現をなくした修正のため、訂正を認める。
Page 219, Line 12-13 The entrepreneurial function of government is accordingly carried out with entrepreneurship and technological innovation ²⁰⁴ .	Page 181, Line 7-8 The entrepreneurial function of government is indeed supported with entrepreneurship and technological innovation ²⁹⁵ .	明確な表現への修正のため、訂正を認める。
Page 219, Line 15-19 Christensen ²⁰⁵ describes a technological innovation's framework, named hereby as "attack from below" where the traditional performance attributes of a product is to move to the higher end of the market. Christensen ²⁰⁶ contends that this move creates opportunities for disruptive technologies to "attack from below" and occupy the lower end of the market, where a product is to move to the low-end of the market.	Page 181, Line 10-15 Christensen ²⁹⁶ describes a technological innovation's framework, named hereby as "attack from below" where the traditional performance attributes of a product is to move to higher segment of the market. Christensen ²⁹⁷ contends that this move creates opportunities for disruptive technologies to "attack from below" in order to conquer the lower segment of the market, where a product move to the low segment of the market.	明確な表現への修正のため、訂正を認める。
Page 219, Line 23-24 For the author, Intelligent Transport System is a shift of innovation pattern from a Christensen perspective to a Utterback one	Page 181, Line 17-18 For the author, Intelligent Transport System is a shift of innovation pattern from a Christensen perspective to an Utterback one.	綴り修正のため、訂正を認める。
Page 220, Line 2-10 Partnerships are designed to complete what each organization is not capable of realizing on its own for the reason of lacking resources, expertise, or experiences. In general, partnerships include the following elements: (1) a shared vision; (2) a strong willingness to work together; (3) the potential of attaining different goals together; (4) pooled resources, expertise and experiences; (5) shared risks and benefits; and (6) flexible consensus building processes for decision-making.	Page 181, Line 22 - Page 182, Line 4 Partnerships are aimed at complementing each side not able of achieving its goals on its own due to lack of financial resources, technological expertise, or experiences. Generally, partnerships consist of: (1) a common vision; (2) a strong willingness to work together; (3) the commitment to attain goals together; (4) shared resources, expertise and experiences; (5) shared risks and benefits; (6) consensus for decision-making processes making	明確な表現への修正のため、訂正を認める。
Page 220, Line 12-15 1, - the technological approach (i.e. chapter III Technology), among vehicles and between vehicles and transport infrastructure, which can help e.g. to prevent crashes and reduce the severity of injuries that occur by in minimizing the consequences of crashes with the use of telecommunication technologies.	Page 182, Line 6-8 1, - the technological approach (i.e. chapter III Technology), among vehicles and between vehicles and transport infrastructure, which can help e.g. to minimize the consequences of crashes with the use of telecommunication technologies.	冗長な表現をなくした修正のため、訂正を認める。

<p>Page 220, Line 20-28</p> <p>The institutional approach is based on partnerships: there are a large number of different ways partners can work together such as Public-Private Partnership (PPP), National Innovation System (NIS), Public-Public Partnership and others. Each of these different ways of partnering may be thought of as a partnership model – a particular way of interacting among different partners. The success of ITS is correlated to the partnership of multiple stakeholders in the design of policies and in their implementation where each partner has specific roles and responsibilities. Partnerships are required to combine the capabilities and resources to create win-win situations for the various partners involved.</p>	<p>Page 182, Line 13-19</p> <p>The institutional approach is based on partnerships such as Public-Private Partnership (PPP), National Innovation System (NIS), Public-Public Partnership and others. Each of these may be thought of as a partnership model – a particular way of interacting among different partners. The success of ITS is correlated to the partnership of multiple stakeholders in the design of policies and in their implementation where each partner has specific responsibilities. Partnerships combine capabilities and resources to create win-win conditions for the partners involved.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 221, Line 3-11</p> <ul style="list-style-type: none"> Realizing the ITS vision depends on building partnerships within and between the public sector at all levels and the private sector in its broadest sense. Effective and ongoing partnerships are essential to the long-term success of ITS technological deployment. Public-private partnerships bring the strengths of each sector together for the benefit of both. The public and private partners create the services for the private sector principal customer base, which is also the same public sector’s base: vehicle drivers and passengers. 	<p>Page 182, Line 22 – Page 183, Line 2</p> <ul style="list-style-type: none"> Realizing the ITS vision depends on “building partnerships within and between the public sector at all levels and the private sector in its broadest sense”²⁹⁹ (www.itsa.org). Operational and continuing partnerships are indispensable to the sustainable success of ITS technological deployment. “Public-private partnerships bring the strengths of each sector together for both benefit”³⁰⁰ (www.worldbank.org) Both public and private partners create services for the same users: private sector customer, who are the same public sector’s citizen: drivers and passengers. 	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 221, Line 16-21</p> <ul style="list-style-type: none"> Public sector needs to help accelerate ITS deployment by further encouraging private sector, providing market incentives and removing barriers that slow down private sector involvement. Steps have to be taken by the public sector to assure that private sector services serving public objectives are supported by adequate policies that provide return on investments for the private sector. 	<p>Page 183, Line 7-12</p> <ul style="list-style-type: none"> Public sector needs to help accelerate ITS deployment by further encouraging private sector, with market incentives and with eliminating barriers that slow down private sector involvement. Public sector needs “to assure that private sector services serving public interests are sustained by suitable policies that provide return on investments for the private sector”³⁰¹. 	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 221, Line 23-24</p> <p>ITS is leading to the creation of new products, services and distribution channels not only within traditional industries but also to a whole new industry.</p>	<p>Page 183, Line 14-15</p> <p>ITS is creating new products, services and distribution channels not only within existing industries but also to a whole new industry.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 222, Line 19-25</p> <p>Neither the public sector nor the private sector alone as main partners would have achieved ITS implementation objective: each is</p>	<p>Page 184, Line 10-16</p> <p>Neither the public sector alone nor the private sector alone as main partners would have achieved ITS implementation: each is</p>	<p>明確な表現への修正のため、訂正を認</p>

<p>dependent on the partnership of others to accomplish its goals. Much of what the public sector does in relation to ITS can have a direct and sometimes profound effect on industry. The public sector needs to consider how and under which circumstances to change its practices to accommodate private sector and business models. Telematics, compared to ITS, is a “stand-alone” industry without public sector involvement.</p>	<p>dependent on the other to accomplish common goals. Much of what the public sector does (or doesn't) in connection to ITS strongly influence several industries (Transport, Car, Telecom...) structure and related business models. Therefore, the public sector needs to adjust itself to the private sector and existing/new business models. Telematics, compared to ITS, is a “stand-alone” industry without public sector involvement.</p>	<p>める。</p>
<p>Page 223, Line 14-16 In 2006, with regard to the traffic safety, a more realistic target of "reducing traffic fatalities to 5,000 or below by the end of 2012" is stated²⁰⁸.</p>	<p>Page 185, Line 14-16 In 2006, with regard to the traffic safety, a more realistic target of "reducing traffic fatalities to below 5,000 by 2012" is stated³⁰².</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 223, Line 17-28 From the New IT Reform Strategy (NITRS) and the 8th safety program, the following specific statements are related to post-crash systems:</p> <ul style="list-style-type: none"> • <i>Reducing the annual number of any casualties to one million or less by 2010.</i> • <i>The government will improve rescue and emergency services systems and emergency medical care services by promoting closer liaison and cooperation with emergency-related organizations such as emergency medical facilities.</i> • <i>collaboration between the various involved government agencies as well as the private sector to realize advanced ITS and leads Japan into the world's safest road traffic society.</i> <i>The improved systems will be designed to deal with road traffic accidents to save the lives of people injured in traffic accidents and to minimize the harm and damage caused by accidents.</i> 	<p>削除</p>	<p>冗長な記述の削除と認められるため、訂正を認める。</p>
<p>Page 224, Line 1-9 The post-crash system such as OnStar is far more valuable than just a localized indication that simply denotes that a crash occurred as in the crash notification systems such as Helpnet. The post-crash systems will allow the prediction of the probability of severe and specific injuries. It would allow moving from simple knowledge of a location of crash to a detailed clear picture in real time of the severity of the crash. By enhancing the crash information that emergency and medical teams receive, the appropriate type of response assistance will be provided and will consecutively reduce the numbers of time-critical injuries.</p>	<p>Page 185, Line 18-25 The post-crash system such as OnStar is far more valuable than just a localized notification that basically indicate that a crash occurred as in the crash notification systems such as Helpnet. The post-crash systems predict the probability of severe and specific injuries. It would allow moving from simple notification of a location of crash to a detailed real time information on the severity of the crash³⁰³. By enhancing the crash information received by the emergency and medical teams, adequate (type of) response assistance will be provided and will consecutively reduce the numbers of time-critical injuries³⁰⁴.</p>	<p>参考文献を明示し、明確な表現への修正のため、訂正を認める。</p>

<p>Page 225, Line 9-15 Weiss²⁰⁹ states that Japan, in its industrial transformative capacity, coordinates industrial change in accordance with the changing conditions of international technological competition. The 1996 "Comprehensive Plan for ITS in Japan"²⁰¹ mentions that "ITS brings a dynamic and intense international competition behind the scenes in the field of technological development and Japan should seize this opportunity to take the lead in the international arena through ITS promotion."</p>	<p>Page 186, Line 26 - Page 187, Line 3 Weiss³⁰⁵ states that Japan, in its industrial transformative capacity, matches industrial change in accordance with the changing international technological competition. The 1996 "Comprehensive Plan for ITS in Japan"³⁰⁶ mentions that "ITS brings a dynamic and intense global competition in technological development and Japan should seize this opportunity to take the lead in the global arena through ITS³⁰⁷."</p>	<p>参考文献を明示し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 226, Line 12-18 In such PPP2P, the Japanese PPP would collaborate with an Asian public sector. The parties involved in PPP2P and their interaction can be summarized as follows: 1- PPP between the Japanese public sector and Japanese private sector 2- Partnership between Japanese public sector and the Asian public sector a. Japanese loan and/or grant aid to the Asian public sector in relation to the purchase of necessary equipment and materials for the construction of transportation infrastructure.</p>	<p>Page 187, Line 27 - Page 188, Line 4 In such PPP2P, the Japanese PPP would collaborate with an Asian public sector. The interaction between parties involved in PPP2P can be as follows: 1- PPP between Japanese public sector and Japanese private sector 2- Partnership between Japanese public sector and the Asian public sector a. Japanese loan and/or grant aid to the Asian public sector in relation to the purchase of required equipment and supplies for the building of transportation infrastructure.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 226, Line 24 - Page 227, Line 2</p> <ul style="list-style-type: none"> • highlight ESRs projects as a development priority. • include road safety components in grants for health and programs. • promote the ITS-based ESRs. • support research, programs and policies related to ITS. • make funding for transport infrastructure projects conditional on ITS implementation • provide, if ITS components are invested at the same time as road construction, further loans for ITS should be made within the ESRs loans. 	<p>Page 188, Line 10-16</p> <ul style="list-style-type: none"> • Highlight ESRs projects as a development prime importance. • require road safety modules for allowances • encourage ITS-based ESRs. • support research, programs and policies related to ITS. • make financing for transport projects conditional to ITS implementation • provide, if ITS components are included in road construction, further loans for ITS should be made within the ESRs loans. 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 227, Line 4-8 From an Asian perspective, as analyzed for ITS in Japan, the same apply to ITS implementation in Asia: there are a variety of institutional and technology prerequisites that need to be put in place for the successful implementation of ITS. Most of the challenges which ITS faces relate less to technology than to institutional innovative flexibility.</p>	<p>Page 188, Line 18-21 From an Asian perspective, as analyzed for ITS in Japan, the same apply to ITS implementation in Asia: a wide range of policy and technological prerequisites are prerequisite for the successful implementation of ITS. Most challenges ITS faces relate to institutional innovative flexibility and less to technology.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 227, Line 21-25</p>	<p>Page 189, Line 6-10</p>	<p>明確な表現へ</p>

<p>Gerschenkron²¹¹ introduced the notion of the state as an entrepreneurial agency in the making and shaping of private sector's markets. Evans²¹² differentiates entrepreneurial role of the state as generator of public-private symbiosis to generate the synergies required for the establishment of a high-technology industry that is competitive in international markets.</p>	<p>Gerschenkron³⁰⁸ introduced the notion of the government as an entrepreneurial activity in the creation and determining of private sector's markets. Evans³⁰⁹ differentiates entrepreneurial role of the state as generator of public-private association to generate the collaborations required for the foundation of a competitive high-technology industry in global markets.</p>	<p>の修正のため、訂正を認める。</p>
<p>Page 230, Line 16-18</p> <ul style="list-style-type: none"> 2006, ITS part of IT utilization to solve problems (New IT Reform Strategy): <i>"it is necessary to create a state where, instead of struggling to catch up, Japan is rather leading the world."</i> 	<p>Page 192, Line 16-17</p> <ul style="list-style-type: none"> 2006, ITS part of IT utilization to solve problems (New IT Reform Strategy): <i>"it is necessary to create a condition where Japan is leading the world."</i> 	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 230, Line 27 - Page 231, Line 4</p> <p>What the public sector does (or doesn't) in relation to ITS do have a direct and profound effect on industry structure and consecutively business models. In the business models, technology itself is not the problem: partnership, user perspective and packaged services. Public sector needs to help accelerate deployment by encouraging private sector, providing market incentives and removing barriers that slow down private sector involvement.</p>	<p>Page 192, Line 26 - Page 193, Line 4</p> <p>What the public sector does (or doesn't) in connection to ITS strongly influence several industries (Transport, Car, Telecom...) structure and related business models. In the business models, technology itself is not the problem: partnership, user perspective and packaged services. Public sector needs to help accelerate deployment by encouraging private sector with market incentives and eliminating barriers that slow down private sector involvement.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 231, Line 18-20</p> <p>ITS as Intelligent Telecommunication System (for transportation)</p> <p>On taking office in 1993, the newly elected Vice-President Gore set in place a range of government initiatives for a National Information Infrastructure.</p>	<p>Page 193, Line 18-21</p> <p>ITS as Intelligent System Management: telecommunication for transportation system</p> <p>On taking office in 1993, the newly elected Vice-President Gore set policy initiatives to create a National Information Infrastructure.</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 231, Line 23-27</p> <p>As Gore launched NII, Harvard's Branscomb²¹³ argued that ITS and the NII should be integrated as well. He pointed out, "ITS activity has occurred almost exclusively in the transportation domain", with "no formal mechanism connecting ITS and the NII," and "ITS has been largely absent in reports coming out of the Gore's on NII activities".</p>	<p>Page 193, Line 24-28</p> <p>As Gore launched NII, Harvard's Branscomb³¹⁰ (Branscomb, 1996) argued that ITS and the NII should be integrated as well. He (Branscomb, 1996) pointed out, "ITS activity has occurred almost exclusively in the transportation domain", with "no formal mechanism connecting ITS and the NII," and "ITS has been largely absent in reports coming out of the Gore's on NII activities".</p>	<p>参考文献を明示し、引用箇所を明確化し、明確な表現への修正のため、訂正を認める。</p>
<p>Page 232, Line 2-6</p> <p>In July 1996, five government bodies²¹⁴ compiled a "Comprehensive Plan for ITS in Japan²¹⁵", a remarkable visionary policy statement, presenting a long-term ITS vision where ITS is defined as a comprehensive info-communications system dealing with transportation and expected to play a leading role in an Info-telecom/Ubiquitous Society.</p>	<p>Page 194, Line 2-6</p> <p>In July 1996, five government bodies³¹¹ compiled a "Comprehensive Plan for ITS in Japan³¹²", a remarkable visionary policy statement, presenting a long-term ITS vision where ITS is defined as "a comprehensive info-communications system dealing with transportation and expected to play a leading role in an Info-telecom/Ubiquitous Society"³¹³.</p>	<p>参考文献を明示し、引用符を挿入して引用箇所を明確化した修正のため、訂正を認める。</p>

<p>Page 232, Line 7-15 In 2001, "e-Japan Strategy" advocates to develop of Japan as the world's most advanced telecom nation and positions the ITS systems as part of a strategy to develop its telecommunication infrastructure. ITS in Japan is more a tool and an opportunity to apply and develop telecommunication infrastructure for the transport sector including vehicle industry than a solution to local transport problems. Many countries have positioned their ITS plans as integral parts of their traffic and transportation plans policies. Japan has a different approach by considering ITS as part of a Telecom Policy for competitive global advantage.</p>	<p>Page 194, Line 7-14 In 2001, "e-Japan Strategy" advocates to develop Japan as the world's most advanced telecom country and positions the ITS systems as part of a strategy to develop its telecommunication infrastructure. ITS in Japan is more a tool and an opportunity to apply and develop telecommunication infrastructure for the transport sector including vehicle industry than a solution to local transport problems. In contrast of many nations which have assigned ITS primary parts of their traffic and transportation policy, plans Japan has a different approach by considering ITS as part of a Telecom Policy for competitive global advantage.</p>	<p>認める。 明確な表現への修正のため、訂正を認める。</p>
<p>Page 232, Line 23-24 The public sector needs to consider how and under what circumstances to change its practices to accommodate private sector and business models.</p>	<p>Page 194, Line 21-22 The public sector needs to adjust itself to the private sector and existing/new business models.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 233, Line 1 Technology approach</p>	<p>Page 194, Line 25 Innovation approach</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 233, Line 10 Partnership approach</p>	<p>Page 195, Line 5 Business Strategy approach</p>	<p>明確な表現への修正のため、訂正を認める。</p>
<p>Page 233, Line 14-19 Implementing the ITS policy depends on building partnerships within and between the public sector at all levels and the private sector. Compared to PPP, partnerships between public agencies have been less successful in Japan. Partnering process between public agencies are often obstructed by political or other various peripheral external factors. Inside Japan, public partnership should be part of a process that is inclusive, open and participatory.</p>	<p>Page 195, Line 9-13 Implementing the ITS policy depends on building partnerships within and among the public and the private sector. Compared to PPP, public agencies partnerships have been less successful in Japan. Partnering amid public agencies are frequently filled by political peripheral factors. Inside Japan, public partnership should inclusive, open and participatory.</p>	<p>冗長な表現をなくした修正のため、訂正を認める。</p>
<p>Page 233, Line 26-28 For the author, based on the outcome of his research, ITS –within a Japanese context- should be defined as a intelligent wireless telecommunication system applied to transportation.</p>	<p>Page 195, Line 20-22 For the author, based on the outcome of his research, ITS –within a Japanese context- should be defined as an intelligent wireless telecommunication system applied to transportation.</p>	<p>綴り修正のため、訂正を認める。</p>
<p>Page 234, Line 6-7</p>	<p>Page 195, Line 29</p>	<p>冗長な表現を</p>

ITS provides the means to save large amounts of time by more effectively and economically moving people and goods.	ITS provides effective and economical means for moving people and goods.	なくした修正のため、訂正を認める。
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References

ORIGINAL	FINAL	Type of corrections
Page 238-265	Page 200-211	参考文献の追加によって文献番号が変わっていること、冗長な参考文献を削除したことから、訂正を認める。