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**Interparliamentary communication
and computer networks in WEU member countries**

REPORT

submitted on behalf of the Committee for Parliamentary and Public Relations
by Sir Russell Johnston, Rapporteur

*Interparliamentary communication
and computer networks in WEU member countries*

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TABLE OF CONTENTS

DRAFT RESOLUTION

on interparliamentary communication and computer networks in WEU member countries

DRAFT ORDER

on interparliamentary communication and computer networks in WEU member countries

EXPLANATORY MEMORANDUM

submitted by Sir Russell Johnston, Rapporteur

- I. Introduction
- II. The Internet today
 1. Internet: theory and practice of the network of networks
 2. The issues raised by the Internet
- III. Interparliamentary communications
 1. Computer networks in national parliaments
 - (i) Germany
 - (ii) Belgium
 - (iii) Spain
 - (iv) France
 - (v) Greece
 - (vi) Italy
 - (vii) Luxembourg
 - (viii) Netherlands
 - (ix) Portugal
 - (x) United Kingdom
 2. The WEU Assembly in the age of the Internet

APPENDICES

- I. The origins of the Internet: the third world war
- II. Glossary
- III. Data security on the Internet
- IV. Internet addresses

1. Adopted unanimously by the committee.

2. Members of the Committee: Mr Masseret (Chairman); Sir *Russell Johnston*, Baroness Gould of Potternewton (Vice-Chairmen); Mr de Assis, Mrs Beer, MM *Benvenuti*, Birraux, Decagny, Dionisi (Alternate: *Carcarino*), Sir Anthony Durant (Alternate: Lady *Hooper*), Mr Erler, Mrs Err, Mr Eversdijk, Mrs Fernández Sanz, Mr Ghesquière (Alternate: Mrs *Maximus*), Mr Harmegnies (Alternate: *Valkaniers*), Sir *John Hunt*, MM *Korahais*, Lummer, Mattina, *Micheloyiannis*, Mignon, Mrs van Nieuwenhoven, MM *Niza*, Robles Fraga, Sainz García, *Selva*, Mrs Terborg.

Associate members: Mr *Akcali*, Ms *Aytaman*.

N.B. *The names of those taking part in the vote are printed in italics.*

Draft Resolution

***on interparliamentary communication and computer networks
in WEU member countries***

The Assembly,

- (i) Noting the increasing role information plays in the running of modern-day societies;
- (ii) Uneasy about the risks of data manipulation and disinformation that can arise from uncontrolled development of new methods of mass communication;
- (iii) Concerned that the lack of information about WEU and its Assembly leads to misunderstanding of their role and place in the European security architecture, as evidenced in the discussions preparatory to the IGC and the confusion that reigns over the modified Brussels Treaty in relation to the 1998 time frame;
- (iv) Acknowledging the ever increasing importance of information technology, and in particular the Internet, in national, regional and international communications;
- (v) Stressing the need for national and European parliamentary institutions to adjust to the new working methods involved and master their use;
- (vi) Noting with satisfaction efforts national parliaments are making to computerise parliamentary work and thus improve the flow of information to members and between parliaments and other European institutions;
- (vii) Desirous of close cooperation between the Assembly, national parliaments and other relevant institutions for the purpose of securing their presence on the Internet and using it to establish a European-wide computerised data network incorporating security and defence matters;
- (viii) Stressing the importance of WEU associate members and observers being closely associated in this process, together with the central European countries that are candidates for accession to the European Union and NATO, and of cooperating in this field with Russia and Ukraine,

INVITES THE PARLIAMENTS OF MEMBER, ASSOCIATE MEMBER, OBSERVER AND ASSOCIATE PARTNER COUNTRIES

1. To encourage information exchange between parliaments by means of electronic communication systems and the Internet;
2. To participate actively, in appropriate ways including legislation, in developing and setting up such systems, all the while ensuring that the process remains within their control, so as to safeguard parliamentary democracy from abuses, such as the manipulation of data, to which development in a purely technological sense might give rise;
3. To encourage debate within their confines and between parliaments on the role of computer technology and the Internet in modern societies, paying particular attention to the political and social aspects of this issue, especially in relation to the education of future generations;
4. To cooperate with one another and with the WEU Assembly and other European and Euro-Atlantic parliamentary institutions in order to establish a European parliamentary network incorporating security and defence matters.

Draft Order***on interparliamentary communication and computer networks
in WEU member countries***

The Assembly,

- (i) Noting the growing use of the Internet and electronic communication systems for data transmission and exchange;
- (ii) Concerned that the lack of information about WEU and its Assembly leads to misunderstanding of their role and place in the European security architecture, as evidenced in the discussions preparatory to the IGC and the confusion that reigns over the modified Brussels Treaty in relation to the 1998 time frame;
- (iii) Stressing the widespread dissemination of information that can be achieved at low cost as compared with traditional means such as postal, messenger, telephone and telecommunications services;
- (iv) Recognising the advantages that can be derived, in terms of the Assembly's image and an awareness of its role on the part of other institutions and the general public, from a permanent presence on the Internet via the World Wide Web;
- (v) Stressing the need for the Assembly to have the appropriate means for achieving such a presence, in cooperation with national parliaments and other relevant institutions,

I. INSTRUCTS ITS PRESIDENTIAL COMMITTEE

To give its views on whether it would be timely and on such means as might be employed to circulate committee working papers and correspondence between the Assembly, its committees and the national delegations via electronic mail or in other computerised format;

II. REQUESTS ITS COMMITTEE ON BUDGETARY AFFAIRS AND ADMINISTRATION

To envisage providing the Assembly with the means to develop its own computer network, secure a presence on the Internet and use it in the course of its work.

Explanatory Memorandum

(submitted by Sir Russell Johnston, Rapporteur)

I. Introduction

1. Worldwide development and expansion of new technologies for information transmission and public and private communications are having a major political, economic and social impact on contemporary societies. There are many positive sides to this development, however its unpredictable and uncontrolled aspects are also giving rise to reservations and concern on the part of decision-makers at national and international level. The latter include elected parliaments, apprehensive, with some justification, about the emergence of new forms of political expression that could call the foundations of modern parliamentary democracy into question. Their fears are substantiated by the opportunities for disinformation and manipulation of public opinion the use of increasingly sophisticated technologies has opened up, through a process where reality blends with virtuality, beyond the reach of any form of national or international control.

2. The worldwide scale of the Internet serves as an obvious illustration of this aspect of the problem. A communications tool which constitutes the ultimate in decentralisation, this "network of networks" is an awesome instrument whose potential for the dissemination and exchange of information and ideas has not yet been fully explored. It encompasses all the areas of activity in which modern societies are engaged – trade and finance, education and training, political and social matters – in an ongoing process of expansion, unfettered other than by the limits placed upon it by network users and servers, ranging from the man in the street to governments and major multinational corporations. Even though the greater part of humanity is not yet "on the Net" – in other words cannot access it directly or indirectly – the entire world is represented there, down to the remotest communities of our modern-day societies.

3. Another factor in the debate is the Internet's growing role as a junction and interchange for communications between states, international organisations and all types of institutions, including parliaments. Use of electronic mail, or E-mail as it is known, is now widespread and the number of addresses continues to grow apace, making information exchange possible at costs and speeds bearing no relation to those of traditional methods. E-mail also has the advantage of increasingly sophisticated data protec-

tion methods. The "hypertext" system and World Wide Web architecture ("Web" for short) allow servers (suppliers of access, data or services) and users all over the world, ranging from mere individuals to a wide variety of institutions, to be connected to one another. Another major consideration is that communication via the Internet is possible both within and outside a given country, irrespective of the prevailing political situation or the state of telecommunications systems.

4. These are some of the factors that have made the Internet an essential communications tool – one that can justifiably be regarded as ushering in a society where information has an increasingly important part to play and which is becoming a major strategic issue. This is a fact which the United States, a pioneering nation – albeit not the only one – in this field has been quick to take on board, and which explains its presence at every level, governmental and private, of the Internet. European countries are reluctantly becoming involved. Not having yet given thought to considerations affecting areas other than industry and technology, they tend essentially to concentrate on minor, more marginal aspects such as, for example, abuse of freedom of expression, rather than on the myriad potential offered by a communications tool of this nature.

5. Dealing with such issues is a complicated task since the Internet not only has implications for communications but also in the political, economic and defence spheres, any one area of which might provide the subject matter of reports which are more the province of the Assembly's Technological and Aerospace and Defence Committees. The present report from the Committee for Parliamentary and Public Relations proposes to deal briefly but comprehensively, with how the Internet works and some of the major issues it raises, including that of the future of interparliamentary communication, a subject of central concern to the WEU Assembly. Far from this being a simple matter of compiling the addresses of servers located in the various parliaments, the issue to be raised and addressed is that of the expediency at the present time of setting up an interparliamentary network linking the assemblies of the WEU member countries and those of countries associated in various ways with WEU, to which European and transatlantic political, economic and defence organisations might also be connected.

II. The Internet today

6. This report aims to deal with three basic questions: What is the Internet? How does it work and what practical interest does it have for national parliaments and the Assembly and, lastly, what advantages can it offer these institutions? Other aspects of the Internet – for example the security of the network and its cultural and political impact – should also be considered and will be discussed here in a parliamentary context.

1. Internet: theory and practice of the network of networks

7. The word Internet comes from the concept of “inter-networking” developed in the 1960s and 70s by American communications and computer researchers and specialists working in the civilian and military sectors and carrying out research into the question of the survival of command centres in the United States in the event of generalised nuclear war. The solution proposed was the creation of a totally decentralised communications system using existing infrastructure (in particular telephone lines). This network would provide a link between various governmental and private institutions (federal government departments, universities, scientific research centres) and remain operational even if some of its components were destroyed. The resultant system was an open one requiring only a computer, a modem (modulator – demodulator) and a telephone line to link into it. Information could be sent via the modem in binary form (machine language) through the telephone network.

8. Designed for military use, the system rapidly became very popular in university circles for information exchange of all types, principally via electronic or E-mail, each network user having a specific address which was the computer equivalent of a normal postal address. Moreover, unlike the telephone, user costs were based not on the distance and length of a call but on a flat rate and the availability of two-way communications access lines, in other words the line giving a user access to an Internet site is the same as that used to access other parts of the network from that site. At the same time, developments in computer hardware and software made it possible to transmit all types of data in the form of text, images and sound.

9. These technical developments attracted commercial interest that did not exist when the network was created. Companies were formed offering computer information services based on Internet principles. For a flat-rate subscription fee, any public or private user can access databanks made available by the service provider, electronic mail facilities (where the service provider acts as a post box – receiving and forwarding messages) and many other services (information, image and sound archives, on- or off-line debates,

etc.) – all for the cost of a local telephone call, with the service provider making its profit partly from subscription charges, partly from renting access lines and advertising space to companies and institutions seeking to expand their customer base or target audience. Some of these companies such as CompuServe and America on Line, which are American in origin, are now active in Europe.

10. At the same time other services have been created for accessing the Internet. Here the user himself searches world-wide for information of interest to him or exchanges mail with correspondents by direct Internet access through the server, using specialised software (supplied free on subscription) for each type of operation desired. These include:

- (i) electronic mail (E-mail) for sending and receiving all forms of mail (text, images, sound and computer programs);
- (ii) file transfer (using FTP – file transfer protocol) whereby data in any form can be retrieved from or transferred to other computers (but not amended by the remote user);
- (iii) connection to and use of a specific remote computer (Telnet), either for information exchange (including interactive dialogue) or to make use of the other machine and its capabilities for specific operations (carrying out complex calculations on more powerful machines: inputting, amending and deleting information). To use Telnet, computers initiating calls must have correspondents' personal addresses and, as necessary, the codes giving access to their files and functions;
- (iv) discussions on all kinds of subjects (newsgroups) are an interesting feature of the Internet which is a sort of international forum (essentially American dominated) in which participants can share their views and receive and exchange data (text, images, sound, programs). There are now specialist newsgroups for particular countries or languages (in English, French, German, Italian, Spanish and others) and subject headings – society, computing, politics, social issues, economics and so on.
- (v) information or file searches using software that locates the data users are looking for on the Internet by the use of key words. The software connects with the user's chosen server centre and asks it for the address at which the files that are required can be found. If there are no “hits”, connection is

made with another server, and so on. Files can be downloaded using FTP (file transfer protocol);

- (vi) the various software packages that provide access to the World Wide Web are now essential and, arguably, the most important tools for making good use of the Internet. The word Web simply describes the network architecture which is made up of thousands of permanently interconnected computers all over the world (major institutions, public and private service and access providers). The Web has rapidly come to represent the Internet itself. Through a combined text and image and now, at certain sites, sound interface, Internet users at every level have a "visitor's pass", a promotional tool, unparalleled in any other modern medium (enabling information to be circulated to millions of people in nearly every country in the world) or alternatively just a very practical and "fun" way of searching for information, making purchases, sending messages (for example by E-mail), loading files, etc.. It is possible to carry out the operations described above on the Web (mail, file transfer, searches, Telnet, newsgroups) using a single software program (which can be loaded directly at no cost). It is of tremendous propaganda, information and advertising interest, as the ever increasing number of public and private institutions, not to mention individuals who have taken display pages on the Web goes to show: the WEU Assembly, NATO, the United States, United Kingdom and other governments, the French Senate and other national parliaments, major American and European companies, Greenpeace, universities – to mention but a few examples of what can be found in the Web pages. The Web also has the facility, starting from any one of its pages, to connect up the various Internet sites the user accesses without the need to provide addresses. (It is possible to move from the NATO page to that of the WEU Assembly and thence to that of the French Senate and so on). However the major innovation of the Web and the area that holds most promise in terms of its development over the next few years, is its use in all types of commercial and financial transactions – a most important factor in a world that is increasingly dominated by the influence of the financial markets.

11. As a result of developments in computer technologies, the Internet has in a sense become an international institution, at least as far as the major industrial countries are concerned. An immense library, a forum for talk and discussion, an instrument for commercial and financial transactions used by public and private institutions alike and even the ordinary man or woman – the Internet is all of these things. Its ubiquitousness and sustained expansion (the number of individuals and institutions getting connected and the amount of information available continues to increase) coupled with the absence of legislation at international level, the difficulty of controlling the flow of information and monitoring its content, the predominance of the English, or rather the American, language and the overwhelming presence of the United States (at every level, institutional and private alike) amount to a challenge which has so far elicited only a timid response from Europe, which for the time being has no overall view of how it might use the Internet to enhance the status of its community of nation states as a political and economic power. No mere technological innovation, the Internet is already virtually an independent player in international relations, a factor which has political, economic and cultural implications.

2. The issues raised by the Internet

12. The use of the Web for financial transactions has contributed substantially to the development of software to make data exchange secure from adulteration by third parties seeking to intercept or amend information transmitted via the network. Such programs are very common today, but owing to a lack of coordination between states, the conditions governing their use are shrouded in international legal uncertainty. The root of the problem is that the use of data protection methods, which frequently rely on encryption techniques, is not the exclusive prerogative of the financial sector; such methods can also be used to protect all kinds of data circulating on the network including illegal data (emanating from terrorist groups or relating, for example, to trafficking in drugs or arms).

13. However there is little point in making an issue of security without taking account of the content of the information available on the Internet which, by and large, is unclassified, since the interest of its being on the Net is precisely its accessibility to the greatest number of users possible. Abuse undoubtedly does occur but involves only a tiny segment of daily traffic. Users and service providers operating on the Internet are able to restrict access to their data by means of passwords or subscription charges to identify those connected. Use of Telnet is open to greatest abuse but even here it is necessary to have a computer

address and in many cases the password that protects it. This presupposes a level of technical competence in computing which not all users are able to command. With the Web, protection applies essentially to commercial transactions (relaying credit card numbers for example).

14. The security issue is not especially meaningful in relation to parliaments' presence on the Internet, except when Telnet is used, as it can give access to sensitive data that can be copied or amended. However these forms of adulteration often leave a trace allowing the intrusion to be detected. Electronic mail is useful for sending all kinds of information and in this connection it is worth pointing out that the Italian Senate Delegation used E-mail to send the secretariat of this Committee information on computerisation of the Senate's services. It is also possible to send a short E-mail message to which files of tens or even hundreds of pages are attached. When the mail is received, these files simply need to be opened using the appropriate software (data processing, image and sound retrieval, including video) and processed according to their intended use (browsing, printing, amending).

15. For example, within the Committee, working papers might be sent by E-mail or file transfer to committee members who have access to the Internet through their parliaments; they would amend or make suggestions about the text and send it back to the Rapporteur who would revise it and send it back to the members once more for an opinion. This could already be done and a very quick turn-around achieved, without wasting too much paper (the document could be printed out if necessary) and without incurring postal or courier charges – all for the cost of a local telephone call. Electronic mail is not one hundred per cent secure but is still a very safe way of exchanging information and one that is not affected by the practical constraints governing traditional postal services (strikes, transport difficulties, the time factor, etc.). Security could be guaranteed by using the encoding systems already widely available on the Internet, or provided by parliaments' technical services.

16. Use of the Web by parliaments does not raise particular security problems as the information which is to be circulated falls largely within the public domain. The Web is the ideal means of presenting the work of assemblies to a huge audience and at the same time readers (i.e. of Web pages) are able to submit suggestions and comments; in this way the voting public can make representations to its members and senators. This aspect of the relationship between ordinary members of the public and their elected representatives is still in its infancy in Europe, but is becoming normal practice in the United States, essentially because of the peculiarities of the American politi-

cal party system (the Democratic and Republican Parties have only small memberships, hence the need to appeal directly to the electorate outside the traditional party political structures). Since the election of President Clinton, the Republican Party has established a highly active presence on the Internet (Web and newsgroups) and also within the CompuServe and America on Line networks. This political dimension is no doubt set to develop further in years to come with the increase in the number of connections to the network and perhaps foreshadows the dawn of a cyberdemocracy of a somewhat alarming nature as it would be the exclusive province of those having access to such forms of modern communications.

17. Here we come to one of the least discussed but nonetheless important aspects of the Internet. Although technically speaking the Internet covers the entire globe, it is closed to the vast majority of the world's inhabitants on account of their not having access to a telephone network. In our own societies, most people, including the decision-makers, are subject to constant media bombardment on the Net – such are the advantages and disadvantages of the system – but are still unaware of what the Internet actually is and the uses that can be made of it. The Internet remains confined to an elite that is largely urban, academic and technocratic and the recruitment ground for most of society's decision-makers. The Internet's democratic potential cannot be fulfilled until the majority of the population have access to it, not simply for shopping, but for putting forward ideas, stimulating discussion on choices in society and entering into a dialogue with their elected representatives. This implies schools making an effort to teach pupils how to use the Internet in an active and critical way. This is a debate in which parliamentarians who vote education budgets can play a part.

18. Nowadays, in spite of the large number of permanent connections (estimated at 20-30 million worldwide, the vast majority, however, being in the United States) the Internet fails to reflect international cultural and linguistic diversity. This situation is not one that has been engineered deliberately but is simply the logical consequence of the circumstances described in the previous paragraph. English has become the "official" language on the Internet because it is the main language used to communicate in the environments in which the system developed initially in the United States and thereafter in Europe (namely, universities and large multinational companies). Language is but one illustration of the as yet elitist nature of the Internet. Internet sites are at present being created where French, German or Spanish is used – and the list is not exhaustive. However for these languages to be able to be represented, the network should be extended as widely as possible to speakers of French, German and other languages. The

predominance of the English or rather American language simply reflects the larger number of English-speaking users as compared with other language groups. Since language is a vehicle for cultural values, it is hardly surprising that an Anglo-Saxon view of the world – deriving from sources which include CNN, the major American newspapers and radio stations – permeates the network. Only a wide-ranging campaign mounted by national governments in the framework of wider European cooperation (not confined to the European Union) can ensure that Europe has a strong presence on the Internet that adequately reflects its values and cultural diversity.

19. This is a political not a technical matter, and one to which parliaments can respond. In Europe the debate at present revolves essentially around the technological, industrial and commercial spin-offs from the use of the Internet and, in general terms, around the future of telecommunications, when the real issue is the content of the information available on the Internet. Here too, there is a tendency to home in on marginal albeit more sensational aspects for today's media (neo-nazi or islamic fundamentalist sites for example); it would be interesting however to learn why, when a search is carried out, say, on a European writer, the Italian military aeronautics industry or agriculture in Spain, most of the information is found at sites in the United States – and hence in American English – when it might be expected to be stored at major European universities or museums, in Italy or Spain, in the languages of the countries concerned – possibly with an English translation. The example quoted is not a hypothetical one but the outcome of a practical exercise actually conducted and easily verifiable by accessing the Internet. Information and sites which are undoubtedly illegal do exist, but there are also laws for punishing abuse, including the abuse of computerised networks. This is an area in which parliaments have considerable freedom of intervention and should avoid allowing themselves to be distracted from the essential issues by the technical arguments that surround the debate on the subject.

20. Technology is constantly evolving; governments, parliaments, the major social and economic players and others take advantage of it as part of the normal development of our modern-day societies. The central issue in the Internet debate is, specifically, the use that is to be made of the network, the content of the information available on it, the values that are transmitted via its agency and the political and economic image of the world which predominates on the Internet. The network, which is still evolving, has today become an essential communications and information tool; parliaments are aware of the fact and already use it in their work and for publicising their activities throughout the world. They also have a responsi-

bility, through a concerted effort in Europe and in conjunction with American legislators, to make the Internet more accessible to the public and more culturally diverse – by encouraging the teaching in schools of the skills necessary to promote its use – and hence more democratic as a vehicle for conveying values and as a worldwide forum for the discussion of ideas, open to the greatest possible number of the world's inhabitants.

III. Interparliamentary communications

21. The Maastricht Treaty, the preparation of the intergovernmental conference and the move towards a single currency have, despite uncertainty and a lack of clarity on the part of European political actors, contributed to accelerating the process of European integration. At the same time the phenomenon of globalisation and growing economic interdependence means that the future of European political and economic systems is a consideration which must inevitably be addressed. The rapid transmission of information and its dissemination are becoming instruments of power in their own right, shared for the time being among relatively few states, with the United States foremost among them. In this area, European Union countries are acting in disorganised fashion, notwithstanding reports and research, for the most part describing a reality of which they have no more grasp than they have suggestions as to the course they should follow, or any real, demonstrable political intention of translating aspirations voiced in this connection into hard facts.

22. This is an area where national parliaments are still conspicuous by their absence from the European debate, not yet having been able to establish European-wide cooperation such as exists between governments. Constraints imposed by internal policies and widely differing electoral systems make coordination of parliamentary initiatives difficult. This consolidates governments' freedom of action while elected assemblies are subsequently called upon to ratify decisions and commitments that are not necessarily clear, or popular with the electorate, and whose consequences are not always beneficial in terms of the future of parliamentary democracies (disenchantment with traditional political classes, strengthening of nationalist and populist sentiments, distrust of Europe and its institutions, including in foreign and security policy matters).

23. Parliamentary cooperation does of course exist and has been on the increase for many years in multi- and bilateral frameworks and in European and transatlantic institutions (the Parliamentary Assembly of the Council of Europe, the WEU Assembly, the OSCE Assembly and the North Atlantic Assembly) but it does not yet constitute a real political component of the pro-

cess of European integration. The unease felt in certain national parliaments over this process and concerns about the role of national parliaments and their supervisory powers over European policies are to an extent the product of a lack of online communication making it difficult to adopt concerted positions quickly. In this area, the use of the Internet could prove extremely effective by helping to link national assemblies with European and transatlantic parliamentary institutions.

1. Computer networks in national parliaments

24. Computerisation of services, communications and the provision of information, within parliaments and externally, through computer networks, have become everyday features of parliamentary work. As a result, members receive information more quickly and are also themselves able to choose the topics that interest them most. Moreover, these resources provide members with a ready means of two-way contact with the outside world – the world of the electorate. Although the practice is not yet widespread, increasing use of electronic mailboxes means that constituents, when forwarding complaints or suggestions to their members of parliament, can have virtually real-time access to them. This development is still in its infancy but it can safely be assumed that it will come to play an increasingly significant part in years to come. Parliaments are individually acquiring the technology and modernising at their own pace but their efforts already have a common focus – access to and a presence on the Internet.

(i) Germany

25. On 7 March 1996, the Commission for the implementation of New Information and Communications Technologies and Media, set up by the Council of Elders of the German Bundestag, took note of a report (dated 1 March 1996) prepared by the Bundestag administration, dealing with the question of connecting Bundestag members to online services and the Internet in Bonn. Furthermore the Commission instructed the administration to avail itself of the possibilities that are emerging for a temporary arrangement with an external provider which will offer those Bundestag members who so wish the opportunity to access the Internet via an online service on favourable terms. Experience gained will be reflected in the final Internet design. Currently the Bundestag is not connected to external nets (other assemblies, government or European institutions or research institutes). Since mid-January the German Bundestag has been offering information services on the Internet. The Internet connection was also set up to allow the various organisational units of the Bundestag administration, as well as its members, to obtain information of interest to parliamentary work. An information network

linking Berlin and Bonn is currently being developed in cooperation with the Federal Government so as to provide efficient electronic communication between Government and Parliament in Berlin and Bonn in the future.

(ii) Belgium

26. The Belgian Senate is currently engaged in a project, NOMOS¹, for computerising communications. This began in 1996, is due for completion in May 1997 and will include a database on parliamentary activities and the provision of more space on the Internet. The Senate already has its own page on the Web giving information describing its organisation and the documentation it produces (reports of written questions and answers, parliamentary documents and records). For the time being access to the Internet is confined to the Senate's information unit but it is planned to provide an Internet link for the senators, the cost of which is to be met by the Senate.

(iii) Spain

27. The Lower House and Senate have internal computer networks with electronic mail and file transfer systems and links with internal and external databases, including those of the European institutions, and the French Senate and National Assembly. Internet access is limited for the time being to Parliament's research and documentation services and a Web page is planned for the near future. The Internet is also regarded as the preferred means of interparliamentary communication.

(iv) France

28. The French National Assembly and Senate have computer networks for internal use but which also have external links, (e.g. for consultation of government databases). Both chambers also have access to and a presence on the Internet. The Senate is in the process of installing an E-mail system.

(v) Greece

29. The Greek Parliament has an internal computer network and links to the European Commission (Celex, Rapid) and European Parliament (Epoque) databases. Parliament has also been connected to the Internet since June 1995 and its information centre uses the Internet to obtain information of various types which is circulated to interested members. A display page for the Web is currently being designed and should be available in late 1996.

(vi) Italy

30. The Italian Chamber of Deputies and Senate have internal local area networks (LANs) linking their parliamentary and administrative services. The two chambers also have access to external databases in Italy and abroad; they are

1. "Nomos" is the Greek word meaning law.

thus linked with one another. The Senate has invested extensively in the Internet, with at least one work station per department having access to its electronic mail services and the World Wide Web information pages. The Senate also intends to publish its own page on the Web giving information about its activities and membership. Programmes for modernising the computer network are in progress in both chambers. One of these involves a link between the secretariats of the political groups and the senators.

(vii) *Luxembourg*

31. Luxembourg's Chamber of Deputies has highly computerised services available to it. Political groups are linked to a central network and the 60 members of parliament each have their own computer on a decentralised site from which they are able to log in regularly and as required to the central network. The Chamber's staff have computers giving them access to virtually any external server via a pool of modems connected to the digital telephone switchboard. The Chamber currently has access to the European Parliament's OVIDE network but no direct link with the Internet. Connection on a one-off basis is possible however through modem link to an Internet service provider. In 1996 the Chamber plans to extend access to the World Wide Web to members and install its own server with information pages on how the Chamber operates, its membership, agenda and pages assigned to the political groups which they themselves will manage.

32. The Chamber also has a stand-alone archive server on which all parliamentary records from 1945 onwards can be accessed. The documents can be retrieved in dual text-image format, with searching done by descriptor or key-word. All members of the administration, members of parliament and the political groups and their staff have access to this database, which is also available to external users (on request). Alongside computerisation of the Chamber's services, on-going user help and training is provided for the administration and members alike.

(viii) *Netherlands*

33. The two Dutch chambers have internal networks, basically providing electronic mail and communications services between the various departments. External links are mainly with European institutions (the European Commission and Parliament). Internet access is scheduled for both chambers for the first half of 1996.

(ix) *Portugal*

34. In 1993, the Portuguese Assembly embarked upon a large-scale computerisation programme, involving all aspects of a data communications network, which is due to be completed in 1997. The technical equipment – hardware

and software – has already been purchased and installed. The Assembly uses a network to support information exchange between parliamentary services and groups, essentially via electronic mail. Parliament thus has access to government databases but is not yet connected to the Internet, a proposal which is currently being studied.

(x) *The United Kingdom*

35. A Parliamentary data and video network (PDVN) was approved by the House of Commons on 30 June 1994. There are currently some 1 000 users (from both houses) and services include E-mail, fax from computer, access to CD-ROMs (compact disk-read only memory) and to the parliamentary online information service (POLIS), to certain reference documents (telephone directory, list of ministerial responsibilities) and to the Internet, but there are no external links. There is an experimental Parliament page on the World Wide Web. Apart from the completion of the cabling for the PDVN (scheduled to be completed in 2002) it is planned to expand the video network to include satellite TV channels, UK regional TV and video on demand.

36. Whatever the pace or system chosen, it is clear that in the short and medium term the Internet will be the point of contact between the parliaments of member countries and of countries associated in various ways in WEU, through shared channels via major servers such as the one NATO already uses for linking the countries participating in the Partnership for Peace. A future parliamentary network would also include institutions for interparliamentary cooperation and offer wider possibilities for information exchange and coordination of the activities of all of the units involved. It would encourage greater convergence of views by making it possible to obtain virtually real-time information on the state of play in discussions on subjects of common interest in the various parliaments linked to it. Such a system can transmit and receive information, making on-going dialogue possible between parliamentarians and their constituents. This could give rise to a new form of parliamentary democracy, provided that assemblies take control of the process and embark upon it after due consideration and in a coordinated fashion.

37. It is important for European parliamentarians to be aware of this development since it is already in progress in the United States. A project is currently taking shape in the American Congress for a global connection link between legislators in different countries, and unless European Assemblies participate in it in an active and coordinated way, they risk being placed in a position of dependence vis à vis their North American counterparts in the field of computerised communications. The aims of the project, known as the

21st Century International Legislators Project² are as follows:

- develop an Internet site that allows legislators to exchange and access information relating to shared challenges and to form electronic task forces;
- help legislators discover how the tools of strategic planning, process engineering and managing organisational change can facilitate progress;
- publish and distribute material vital to international legislators including: case studies of effective 21st century governance; reports that address policy issues such as trade, the environment, education, economic development, and security problems affecting society; discussions of governments' social and economic foundations;
- hold conferences and seminars that enable successful legislators to outline how they approached and solved problems, and provide forums for other legislators to acquire new insights, skills and solutions.

Active participation by European parliaments is necessary so that the project can take account of features specific to parliamentary work (e.g. legislative procedures and relations with the executive) and of cultural factors and political, economic and social priorities.

2. *The WEU Assembly in the age of the Internet*

38. Despite both its political and military endeavours since its reactivation in 1984, WEU is still a little-known organisation. The reopening of the debate on whether or not the time is ripe for a European defence independent of NATO, based on the idea of a European security and defence identity (put forward at the January 1994 NATO summit), means that more information needs to be made available on WEU, the reasons for its existence, its methods of operation and future potential, to prevent it being sidelined and its absorption, pure and simple, by other institutions with or without responsibilities in security and defence matters. The Internet is the ideal instrument for conveying a positive image of WEU to the public at large and to target audiences (researchers, political decision-makers, companies etc.) highlighting its activities and modest though steady progress towards becoming a true European pillar of the Alliance and the defence arm of the European Union.

39. From this standpoint, use of the Internet offers substantial advantages. As a vehicle for

communications, the Net is unrivalled in comparison with other media in that it reaches large numbers of people all round the world, continuously and at low cost. Television, radio and press interest in WEU is very sporadic, and frequently arises in connection with topics more directly related to NATO and the European Union, thus adding to the confusion about the organisation's place in the European security system. The Internet can give WEU a continuous and tangible presence in communications world-wide and also has the advantage of providing information which is updated regularly and not only when ministerial meetings or Assembly sessions are held. The existence of a WEU page on the Web, albeit courtesy of a service provided by NATO, can enable anyone who is interested to obtain information about the organisation and the activities of its various bodies (Planning Cell, Satellite Centre, military exercises, WEAG, etc.). Obviously WEU is itself responsible for selecting the information it sees fit to put on the Internet, commensurate with the need for confidentiality or secrecy as regards its activities. NATO's experience can, however, serve as an example.

40. As far as the Assembly is concerned, the Internet offers considerable advantages in terms of media impact and low cost. Assembly documents distributed via the usual channels (particularly to the specialist press) reach a restricted audience of correspondents, who will publish or devote attention to them according to their own priorities or those of the media agencies or institutions for whom they work. The same documents circulated on the Internet will reach a much wider audience covering different areas of activity (press, public and private research institutes, governments, universities etc.). Such documentation can be consulted at any time, passed on (by electronic data transfer to computer hard disk), printed and circulated to other people who have no access to the Internet. The Assembly has but a single input to make in the process – namely loading the document on its Web page – an operation costing no more than the price of a local telephone call charged at normal rates (with the possibility of taking advantage of off-peak rates). Thus considerable savings in terms of the reproduction and dissemination of documents can be made without detriment to the Assembly's document distribution arrangements.

41. Progress in computerising national parliaments and providing them with Internet access, means that there will also be changes in their working arrangements with the Assembly over the coming years. At some future date it will be possible to send working papers and committee reports to members solely by electronic means, have daily exchanges of views, receive comments and suggestions via E-mail, provided that it can be made secure enough (for example using

2. 21st Century International Legislators Project: 316 Pennsylvania Ave., S.E. Suite 403 Washington D.C. – 20003 – 1146.

encryption systems, restricted access by password only, or by subscription). We are not talking science fiction here but about a major development in modern society with implications for all areas of human activity. Like NATO and the North Atlantic Assembly, the WEU Assembly should have a presence on the Internet, not simply for its own benefit but for that of WEU as a whole. Through cooperation with national parliaments and other organisations involved in security and defence, the Assembly could make a major contribution to establishing a European computerised network, linking the institutions mentioned and open to the world at large via the Internet. The information thus made available, together with round-the-clock communications, would lead to more effective and coordinated parliamentary activity with regard to these matters in a more characteristically European and Euro-Atlantic framework than in the past.

42. This latter consideration is most important since in the United States the Internet has already become the blueprint for communications in the 21st century. This is therefore the channel through which transatlantic dialogue will take place, enabling Europeans to create a greater awareness among society's leaders and the public, specialist or otherwise, of their views and activities in relation to politics and defence. The Federal Administration, Congress and States all have access to and information pages on the Web describing their structure, operation and activities. They communicate with citizens via E-mail, providing them with constantly updated information. This contact could also be extended to their European counterparts and made secure, if necessary, between institutions by using encryption methods or simply by protecting access by means of passwords and personal identity codes. There are no technical obstacles to developing a transatlantic dialogue in this way. The decision is one which has to be taken at a political level and must be taken on board if governments are to control and influence the development of the Net and its use for information and communications (bearing in mind that the possibilities that exist for data manipulation and disinformation via computer systems are more extensive and sophisticated, making their results for more difficult to detect).

43. With a view to strengthening cooperation with national parliaments, the Assembly organised a seminar on 2 and 3 May 1996 in conjunction with the ECPRD (European Centre for Parliamentary Research and Documentation) on parliaments and the Internet ("Parliaments on the Net"), intended mainly for officials responsible for following such matters in national assemblies. The purpose of the initiative was to define a number of concrete steps to enable assemblies already using the Internet achieve better coordination internationally and avoid unnecessary duplication of effort and to provide parliaments not yet using

this particular communications tool with a frame of reference they could use in due course, if they so wished. Following discussions at the seminar it was decided to create a joint parliamentary page on the Web to act as a "sorting office" from which it would be possible to connect to the various national parliaments. The participants also reached agreement on the concept of a basic data content for Web parliamentary sites, which would include general and more specialised information (constitution, basic laws, rules and procedures) in several languages if possible, in order to facilitate wide dissemination of information, no matter which country the request originated from.

44. Those attending the seminar also agreed on the need to devise computerised research tools enabling the various documentation services both to communicate and exchange information among themselves and, either directly or through a number of different organisations (such as the ECPRD, NATO, the European Union and other miscellaneous foundations), to assist those parliaments in central and eastern Europe which are planning to use the Internet for parliamentary work. Wide agreement was reached on developing the use of electronic mail (E-mail) for communications between the international secretariats of the parliaments of European countries. This seminar represents an essential contribution to setting up a European parliamentary network which could join forces with the American 21st Century International Legislators project on an equal footing. This would ensure that better account is taken of political and cultural diversity and European interests, which could in turn contribute to better control over the process of evolution towards a "cyberdemocracy", the shape of which is as yet unclear but which could have many advantages (better parliamentary information, enhanced, more intensive interparliamentary communication, greater proximity to and improved dialogue with the electorate) and some disadvantages (data manipulation, disinformation, marginalisation of parliaments in favour of technocratic structures having a monopoly over the operation of computerised information networks).

45. The debate is an important one for the future of parliamentary systems, as the President of the French National Assembly, Mr Philippe Séguin stressed at the Interparliamentary Conference of the Council of Europe on "National parliaments' new role in building Europe" (held in Paris on 28 and 29 March 1996), when he argued that "the increasingly technical nature of the problems, the rise of new multinational bodies over which there is no real control and the growing influence of the media all contribute to accelerating the process of erosion of parliamentary authority – a process which must be fiercely resisted. Only modern parliaments which adjust to the

new conditions under which democracy is practised and strengthen mutual cooperation, will be in a position to shoulder successfully the new responsibilities facing them. From now on, the work of parliaments must take account of the development and worldwide spread of the new information technologies, as typified by the Internet. The enormous potential of this new tool and the vistas

it offers of the paramount importance of information in our society should prompt parliaments to reflect jointly on this matter without delay". The WEU Assembly intends to participate fully in this essential process, in cooperation with national parliaments and in a European and transatlantic perspective, indissociable from its role as the parliamentary component of a defence Europe.

APPENDIX I

The origins of the Internet: the third world war

1. The cold war and the theory of mutual assured destruction (MAD) associated with the possibility of a major nuclear conflict made a decisive contribution to the rise of the Internet. Essentially a military project in origin, it ultimately broke free of its creators and today represents a major international force in the fields of politics and trade, catching nation states completely off balance. Even more so than the odyssey of space conquest, the Internet is now the high frontier of progress and development in modern societies.
2. In the early 1960s, in a cold war context where a nuclear exchange between the two great power blocs was acknowledged as a possibility, US strategists of the RAND Corporation faced a major problem: how could the US authorities communicate successfully after a nuclear war? However well protected the country's command and control systems for responding to nuclear attack might be, they would still be vulnerable to the impact of atomic bombs. Yet even when totally disorganised, the network would have to continue to provide links between the various states, towns and military bases. The essential condition for making sure this was possible was revealed by RAND in 1964. The network would have no central authority; it would be designed to operate "while in tatters". A completely decentralised network could not be systematically targeted by enemy strikes.
3. This assumption was based on four principles:
 - (i) the network was assumed to be inherently erratic under all circumstances;
 - (ii) the various network nodes would all have equal status, each with its own authority to originate, pass and receive messages. Communication would be by standard or optical fibre underwater cables (for high speed transmission of all forms of data: text, images and sound) or by satellite;
 - (iii) the messages themselves would be divided into "packets", addressed and transmitted separately. Each individual packet would find its own route through the network from the transmitter node to the addressee;
 - (iv) the particular route taken by the packet would be unimportant, provided the messages reached their destination. If whole stretches of the network had been destroyed, the message packets would use the surviving nodes to arrive at the proper place. Network users would be unaware of the delivery route taken by the information they received.
4. American Universities such as the MIT (Massachusetts Institute of Technology) and UCLA (the University of California, Los Angeles) were involved in this project; however the first test-network based on the above principles was set up in the United Kingdom in 1968. Work on developing the Internet was internationally based from the start. At a slightly later stage, in the United States, the DARPA, the Pentagon's Defence Advanced Research Projects Agency decided to launch a more ambitious project using network-linked "super-computers" to meet the needs of national research and development projects.
5. The first such node was installed in UCLA in 1969. By the end of that year, four nodes were operating on the fledgling network, called Arpanet after its Pentagon sponsor. These four computers could transfer data on dedicated high-speed transmission lines. They could even be programmed remotely from other nodes. The network expanded rapidly and by 1971 there were 20 or so nodes in Arpanet and 37 in 1972, serving the scientific and research community. The following year, an international conference on computer communications, organised in Washington, brought together all the network pioneers in a public demonstration of the network during which members of the public were able to use Arpanet and its applications all over the United States.
6. In 1975, Arpanet was transferred by DARPA to the Defence Communications Agency (now the Defence Information Systems Agency) as an operational network and the first demonstration of the Internet network was organised in San Francisco in July 1977. In addition to Arpanet, the demonstration involved radio broadcasts and a satellite link, Satnet, with ground stations in West Virginia, England and Sweden and also in Italy and Germany. Broadcasts from a mobile unit (van) travelling along a San Francisco freeway were picked up by the Arpanet link and transmitted by satellite to University College, London, which sent the information back to the United States by the same route.
7. All these experiments, the aim of which was to simulate a situation with someone in a

mobile battlefield environment transmitting via a continental network, then an intercontinental satellite network and finally back across a cable network to national headquarters, were funded by the US Defence Department. However the initial goal of long-distance communications was soon eclipsed. Personal messages and mail became the main traffic, turning the network into a sort of electronic post-office where individuals had their own personal addresses. The network was swamped with mail from science fiction buffs, frowned on by Arpanet, which could however do nothing to stop it. The network's decentralised structure made expansion easy and very difficult to control.

8. The original standard for communication via Arpanet was the NCP or Network Control Protocol, which was superseded in time by a more sophisticated procedure known as the TCP/IP (Transmission Control Protocol/Internet Protocol):

- the TCP converts messages into streams of packets at source, then reassembles them back into messages when they reach their destination;
- the IP handles addressing, an essential function, given that message packets are routed across multiple nodes and even across multiple networks with multiple standards (not only the NPC referred to, but others such as Ethernet or the commercial network X 25).

9. From 1977, TCP/IP was used by other networks to link up with Arpanet. Arpanet remained fairly tightly controlled, at least until 1983, when its military segment broke off and became Milnet. During the 1980s, widely varying social groups found themselves in possession of powerful computers which it was easy to link to the "network-of-networks". Consequently, Arpanet became a smaller and smaller neighbourhood amid the galaxy of other linked machines. As use of TCP/IP, which belonged to the public domain, became more common, whole networks became linked, haphazardly, to this branching complex of networks, now known as the Internet.

10. Connection to the Internet cost the taxpayer practically nothing since each computer was independent and its users responsible for their own funding and technical requirements. In 1986, the United States National Science Foundation became involved in developments through its NSFnet, which, until 1990, set the pace for technical advance by linking newer, faster supercomputers, through rapidly expanding links. Other government agencies have since joined the network, including NASA, the National Institute of Health and the Department of Energy.

11. In this growing network, some foreign computers and a few American ones chose to be

denoted by their geographic locations. The others were grouped by the six basic Internet "domains": government, military, education, commerce, organisations and "net" computers (serving as gateways between networks). Arpanet ceased to exist in 1989, a fact scarcely noticed by its users as the network's functions not only continued but were steadily improved. The use of TCP/IP standards for computer networking is now generalised. The four nodes which originally made up the network have burgeoned into thousands scattered worldwide over a few dozen countries and access to specialised data and personal communication provided by the Internet has been of considerable assistance to scientific research.

12. The Federal Government of the United States continues to maintain a keen interest in the network and in late 1991 Congress approved a five-year, two billion dollar project, for the creation of the NREN (National Research and Education Network), to upgrade the Internet backbone. NREN will be fifty times faster than the fastest available network, able, for example, to transfer the entire Encyclopaedia Britannica in a single second, and to transmit three-dimensional images. The Internet now has little to do with communications survival in the wake of a nuclear holocaust. Interactive multimedia services (sound and animated pictures in video format) also became available on the net in 1991.

13. Over recent years the system has become increasingly international and steadily more commercialised. Difficulties over regulation, security and confidentiality and problems of scale in relation to network size are beginning to surface. Similarly, adapting legislation to this new means of communication is not easy and many legal issues remain unresolved. Expansion of the network has given rise to a real user community. Both that community and the diversity of its interests needed to be recognised. Hence the Internet Society was founded in 1992. It brings together people from different professional backgrounds, drawn from different countries, and is responsible for organising workshops and conferences to make network information available to the widest possible audience. Today the Internet covers virtually the entire planet and is increasingly becoming an integral part of the new international relations scene, the symbol of a multipolar world. The early 1990s marked a turning point in the growth of the Internet. The number of machines linked directly to the TCP/IP has doubled every year since 1988. The Internet has now moved away from its original base in military and research institutions into schools, public libraries and the commercial sector and even into the lives and homes of individual members of society, encompassing all areas of activity - economic, cultural, political, social, military, etc. that typify modern society.

Key dates in the development of the Internet

- 1964 The RAND Corporation, a major American think-tank, specialising in political and defence issues sets up a project for a decentralised network capable of surviving a nuclear attack.
- 1968 The first test network is set up in the United Kingdom.
- 1969 Arpanet, the first cluster of network-linked computers, is set up at the University of California, under Pentagon sponsorship.
- 1973-77 Setting up of TCP/IP (Transmission Control Protocol/ Internet Protocol) communications standards. These are still in force today.
- 1977 First public demonstration of the Internet held in San Francisco.
- 1982 Generalisation of TCP/IP at the expense of NCP (the Network Control Protocol) the first Arpanet protocol, which failed to perform sufficiently well as the network expanded.
- 1983 *Transitional period*
- Separation of Milnet, the strictly military segment, from the common core of the Internet.
 - Creation of the IAB (Internet Activities Board) to guide the evolution of the protocol suites and to provide research advice to the Internet community.
- 1983-85 *Consolidation Period*
- Hundreds of computers become connected to Internet.
- 1986 Key date marking the start of the exponential growth of the Internet.
- Establishment of NFSnet – a major United States National Science Foundation communications service which helped structure the Internet.
- 1988 Development of commercial and electronic mail services.
- 1989-1996 Integration of the OSI (Open Systems Interconnection) protocols into the Internet architecture.
- Internet today consists of thousands of networks across a large number of countries. It continues to expand and is estimated to have some 20-30 million users.

APPENDIX II

Glossary

Cyberspace	Virtual space comprising all users (servers and visitors) and their data (information and software).
Global village	Internet is one vast virtual community, a “ global village ” where individuals can meet through their computers and the network.
Information highways	Planned worldwide network of ultrafast telecommunication and data transmission lines forming the basis for future worldwide multimedia services: the Web, interactive television, cellular telephones, electronic databanks etc.
Internaut	Name given to someone who has taken out a subscription with a service provider for connection to the Internet and who also has a registered electronic network address.
Protocol	Set of communication rules and procedures which must be complied with in order to access information through a server.
Server	Any institution (public or private) which provides access to the Internet (along with software for using the network) or person providing an information service on the Internet. The WEU Assembly has a site on the Web through the NATO server.
World wide Web	<p>Developed by CERN (European Organisation for Nuclear Research, based in Geneva, Switzerland) the Web consists of graphic interface servers offering extremely user-friendly access to the resources of the server contacted.</p> <p>The Web has today become the most rapidly evolving area of the Internet and is becoming increasingly accessible for financial and commercial transactions, thus making a major contribution to its development.</p>

APPENDIX III

Data security on the Internet

1. Notwithstanding its military origins, the Internet is not a confidential network. It operates on an open access principle without safeguards. Messages travel across several networks by turn where it is possible for third parties to intercept and read them. This raises problems of confidentiality as regards mail or electronically transmitted data. Another problem arises from the fact that messages do not always arrive at their destination. When a computer server is overwhelmed with requests for access, bottlenecks can block the network for several minutes and cause messages to be lost. However such incidents occur relatively infrequently.

2. There are two opposing theoretical approaches to the subject of network security. Exponents of the first, which might be described as a "libertarian" view, argue that the information transmitted, whatever it may consist of, is submerged in the mass of data and is effectively protected by the sheer volume of the latter. Consequently, it is speed of search and quality of interpretation of information, that differentiates users, rather than exclusive possession of the data. The second, more "security minded" approach advocates tight control and occasionally outright censorship of the information in circulation. Hardware, individuals even, would also be monitored. Access to the network would be restricted and in certain cases conditional upon prior authorisation. The American proposal to incorporate a "chip" in every computer or China's decision to limit access to the Internet on Chinese territory stem from this view. Between the two extremes, thought is being given as to how the Internet can be maintained in its present state while improving the security of transactions.

3. Apart from the protection of people's private lives, security matters are also of relevance to the defence, financial and industrial sectors. It is of prime concern to the intelligence services and the business world alike that their communications should be secure. Sensitive information is stored on computers linked to the Internet and may be vulnerable to attack from computer "hackers" who manage to break into computers (provided they are switched on). With the worldwide expansion of the Internet, any computer directly linked to it can potentially fall victim to problems of security unless precautions are taken. In public or private sector administrative departments the security of every computer is the responsibility of the systems-manager but individual users have a responsibility for taking the necessary precau-

tions. Nowadays a substantial number of services available via the Internet require a "signature", for example a form of identification by password and electronic address, to authorise access to data.

4. Some Internet services ask for a questionnaire to be filled out in advance giving the reasons for a search before access is given to information. This approach must be pursued with caution since the data thus transmitted can be intercepted by a third party and it is frequently preferable to have recourse to more traditional methods such as facsimile copiers. Nowadays, the software used in data transmission operations advises the user as to whether or not the transmission is protected, so that the user can take any action that might be appropriate. In all of these examples, and contrary to received wisdom, anonymity on the Internet is rarely effective.

5. Similarly, it is strongly recommended that sensitive data should not be sent by electronic mail which is vulnerable to interception in the same way as standard postal services or telephone or fax communications. It is impossible to achieve complete security although suitable methods now exist for protecting data exchanges and are available on the Internet. Data encryption is a standard (and very ancient) practice. Only those in possession of a decoding key can read or display data exchanged. Privacy Enhanced Mail or PEM systems also help protect electronic mail by providing encryption tools and identification and decoding keys.

6. Using cryptography to protect communication is being hotly debated at present in the United States and Europe as encryption systems often fall within the sphere of national defence. Until recently, states and major national and international institutions and undertakings had a monopoly over their use. With the development of the Internet, the need for such systems has increased and sophisticated encryption software soon appeared on the Net, with the difference that it was accessible to all users, including individuals. This example of electronic data proliferation is one of the controversial aspects of the Internet. In the United States, as in France, encryption programs are regarded as "sensitive material" in the same way as military equipment, and are banned from export. Encryption may be legal, as in France, but the law then requires that special authorisation be obtained from the SCSSI (Central Department for the Security of Information Systems) under the direct control of the Prime Minister, for sending coded messages via any form of communications

media. Additionally, the key for deciphering the code must be deposited with the organisation in advance.

7. For its part, the American government, in the framework of federal legislation governing this type of interception, has a project for a permanent monitoring system covering the content of information transmitted via computerised networks. This is the purpose of the "Clipper" silicon chip project – which is nonetheless being strongly challenged by the Internet community and civil rights organisations. It is proposed to install Clipper in every computer sold in the United States, thus enabling the relevant government agencies to monitor the content of data exchanges between that computer and any other at all times. Encryption procedures are beyond the reach of most Internet users, being relatively complicated to use; however, the development of commercial and financial services on the net could cause this situation to change.

8. PGP or "Pretty Good Privacy" is among the best encryption software available on the Internet but there are strict controls over its import and export (the software is available free to all users which has led to its author being sued by the Federal Government). The system uses a form of encryption whereby each user has two keys – one publicly available and distributed freely so that the addressee can receive coded messages, the other confidential, allowing only the holder to decode the message. Messages encoded using the public key can be deciphered only by means of the user's own personal key, by which means they are also authenticated. A far higher level of security is thus achieved than through the use of other procedures and the system can be used by anyone having the appropriate software. Its use is illegal in France but tolerated in other European countries, which serves to demonstrate the need for Europe-wide agreement in this field and, furthermore, for an international legal order governing computerised information networks.

APPENDIX IV

*Internet addresses**The National Assemblies*

Germany	Bundestag	http://www.bundestag.de
	Abgeordnete im Internet (private) .	http://www.fu-berlin.de/POLWISS/mdb-projekt/
Belgium	Sénat	http://www.senat.be
Spain	Gobierno	http://www.la-moncloa.es/docp/main.html
Estonia	http://www.vm.ee/
Finland	Eduskunta	http://www.eduskunta.fi/
France	Assemblée Nationale	http://www.assemblee-nat.fr/
	Sénat	http://www.senat.fr/
	AdmiNet-France	http://www.ensmp.fr/-scherer/adminet/elus/an.html
Hungary	http://www.mkogy.hu/
Iceland	Althingi	http://www.akthingi.is/
Italy	Senato (CNR)	http://www.idg.fi.cnr.it/idg/bd-senato/
	Senato (Gopher)	gopher://marvin.stc.nato.int:70/11/partners/italy/senate
Latvia	Saeima	http://www.saeima.lanet.lv
Lithuania	Seimas	http://rc.lis.lt/
Norway	Stortinget	http://sauce.uio.no/Stortinget/
Netherlands	Parliament	http://www.dds.nl/overheid/pdc/parlement.html
Poland	Sejm	http://www.sejm.gov.pl/
	Senatu	http://www.senat.gov.pl/
Czech Republic	gopher://fenrir.psp.cz
Romania	Parliament	http://www.dias.vsat.ro
United Kingdom	Parliament	http://www.parliament.uk/
	HMSO	http://www.publications.hmso.gov.uk/Parliament/
Slovenia	National Assembly	http://www.sigov.si/dz/edz-ds.html
Sweden	Library	http://www.sub.su.se/sam/refdir/ref056.htm
Switzerland	http://www.asmin.ch/

International Assemblies

North Atlantic Assembly	http://www.nato.int/related/naa/homepage.htm
Assembly of OSCE	http://www.centrum.dk/-oscepa/
Assembly of WEU	http://www.nato.int/related/a-weu/homepage.htm
Council of Europe	http://stars.coe.fr
European Parliament	http://www2.echo.lu/parliament/

Reference sites

NATO	http://www.nato.int/
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