



# COST

Domain Committee "ICT"

## COST Action IC1204

Start Date 12/12/2012

*Trustworthy Manufacturing and Utilization of Secure Devices*

## MONITORING PROGRESS REPORT

**Reporting Period:** from 12/12/2012 to 30/04/2013

This Report is presented to the relevant Domain Committee.  
It contains three parts:

- I. Management Report prepared by the COST Office/Grant Holder***
- II. Scientific Report prepared by the Chair of the Management Committee of the Action***
- III. Previous versions of the Scientific Report; i.e., part II of past reporting periods***

The report is a "cumulative" report, i.e. it is updated annually and covers the entire period of the Action.

**Confidentiality:** the documents will be made available to the public via the COST Action web page except for chapter *II.D. Self evaluation*.

Based on the monitoring results, the COST Office will decide on the following year's budget allocation.

### **Executive summary (max.250 words):**

The Action started few months ago (the grant holder signed the contract mid April), so no expenses have done so far. However, some good results can be already mentioned:

- We organized 5 web-based WG meetings to let everybody introduce him/herself to the community
- A special session on "EU Project Information" is organized at ETS13 where the Chair will give a presentation on this Action
- The Vice-Chair presented the Action at the workshop WRTLT'12 and he organized a special session at VTS'13 titled: "Counterfeit IC Identification: How can Test help?"
- The website of the Action is under construction ([www.trudevice.com](http://www.trudevice.com))
- The 1st workshop of the action will be organized on May 30-31.

## I. Management Report prepared by the COST Office/Grant Holder

### I.A. COST Action Fact Sheet

- **COST Action IC1204** - Trustworthy Manufacturing and Utilization of Secure Devices
- **Domain** Information and Communication Technologies (ICT)

- **Action details:**

**CSO Approval:** 07/06/2012  
**Entry into force:** 12/12/2016

**End date:** 11/12/2016  
**Extension:**

- **Objectives**

The aim of the Action is to identify new design and manufacturing flows for the production of secure integrated circuits by creating a strong network between several centers of expertise on hardware security at European level, and to substantially increase the level of cooperation and consequent visibility of European research on this vital topic.

- **Parties:** list of countries and date of acceptance

Belgium (21/09/2012)	Greece (29/08/2012)	Slovakia (02/09/2012)
Czech Rep. (06/12/2012)	Israel (15/10/2012)	Slovenia (08/11/2012)
Finland (10/09/2012)	Italy (28/11/2012)	Spain (22/10/2012)
FYR of Macedonia (25/10/2012)	Netherlands (27/06/2012)	Sweden (20/09/2012)
France (25/07/2012)	Norway (20/12/2012)	Switzerland (16/07/2012)
Germany (05/07/2012)	Portugal (26/09/2012)	United Kingdom (13/06/2012)

- **Intentions to accept:** no intentions to accept so far
- **Other participants:** no other participants

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**Action Web site:**

<http://www.trudevice.com>

**Grant Holder Representative**

CNRS, Rue Michel Ange n°3 - 75794  
 PARIS cedex 16 represented by Mrs  
 Ghislaine GIBELLO, Regional Delegate  
 CNRS Languedoc-Roussillon

- **Working Groups**

**WG1: Manufacturing test of secure devices**

Said HAMDIOUI TU Delft  
Marie-Lise FLOTTES LIRMM - CNRS/Univ Montpellier 2  
Nicolas Sklavos Tech. Educ Institute Patras  
Lejla Batina iCIS - Radboud University Nijmegen  
Nele Mentens, KU Leuven  
David Hély Grenoble INP - LCIS2  
Bruno Rouzeyre LIRMM - CNRS/Univ. Montpellier 2  
Francesco Regazzoni ALaRI - Univ. of Lugano  
Viacheslav Izosimov SemCon  
Urban Ingelsson SemCon  
Salvador Manich UPC

**WG2: Trustworthy manufacturing of secure devices**

Paris Kitsos, EAP  
Lilian Bossuet, U. St. Etienne (FR)  
Nicolas Sklavos, Teipat Petras  
Osnat Keren, Bar-Ilan Univ.  
Artemios Voyiatzis  
Lejla Batina  
Julien Francq, Cassidian (FR)  
Assia Tria, CEA (FR)  
Nele Mentens, KU Leuven  
David Hély  
Bruno Rouzeyre  
Said HAMDIOUI  
Pedro Peris-Lopez  
Philippe Loubet Moundi  
Milos Drutarovsky  
Marie-Lise FLOTTES  
Francesco Regazzoni  
Franck Courbon  
Róbert Lórencz

**WG3: Fault attack detection and protection**

Bernd Becker U. Freiburg  
Bruno Rouzeyre LIRMM  
Nicolas Sklavos TEIPAT Patras  
Lilian Bossuet  
Zebo Peng U. Linköping  
Osnat Keren Bar-Ilan Univ.  
Lejla Batina  
Julien Francq Cassidian  
Assia Tria  
Ilia Polian U. Passau  
Nele Mentens  
David Hély INP Grenoble  
Said HAMDIOUI  
Carles Ferrer  
Philippe Loubet Moundi Gemalto  
Viktor FISCHER  
Marie-Lise FLOTTES LIRMM  
Francesco Regazzoni U. Lugano  
Paolo Maistri CNRS/TIMA  
Tim Güneysu Ruhr U. Bochum

Franck Courbon Gemalto/ENSM.SE  
Róbert Lórencz  
Viacheslav Izosimov Semcon  
Urban Ingelsson Semcon  
Jean-Max Dutertre ENSMSE  
Linus Feiten U. Freiburg  
Ricardo Chaves IST, TU Lisbon  
Noemie Boher INP Grenoble, ST

#### **WG4: Reconfigurable devices for secure functions**

Viktor Fischer  
Nele Mentens  
Nicolas Sklavos  
Francesco Leporati  
Lilian Bossuet  
Lejla Batina  
Julien Francq  
Guy Gogniat  
Carles Ferrer  
Milos Drutarovsky  
Francesco Regazzoni  
Paolo Maistrii  
Tim Güneysu  
Róbert Lórencz

#### **WG5: Validation, Evaluation, and Fault Injection**

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Lilian Bossuet  
Zebo Peng  
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Julien Francq  
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Nele Mentens  
Guy Gogniat  
David Hély  
Bruno Rouzeyre  
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Noemie Boher

## I.B. Management Committee member list

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## I.C. Overview activities and expenditure

**2013 Budget** (from 01/04/2013 to 31/03/2014)

**Total Action Budget: 120.450**

**Remaining Action Commitment: 120.450**

**Remark: first expenses will be done in the next weeks (the grant holder signed the contract mid April), so no expenses have been done so far.**

### Meetings

Meeting Type	Date	Place							Cost	Total
										<b>0</b>

### STSM

Beneficiary	Date	Place							Cost	Total
										<b>0</b>

### Workshops

Title	Date		Place						Cost	Total
	From	To	From	To						
										<b>0</b>

### General Support Grants

Beneficiary	Date								Cost	Total
										<b>0</b>

### Schools

Title	Date	Place							Cost	Total
										<b>0</b>

### Dissemination

Title	Date	Place							Cost	Total
										<b>0</b>

### Others

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**Action Total : 0**

## **II. Scientific Report**

The Action started few months ago. The Grant Agreement has been received on April 11<sup>th</sup>. So far, we organized only web-based WG meetings to allow everybody to introduce him/herself to the community. The first activity (as preview in the budget) will be carried on May 30-31 with the TRUDEVICE workshop.

### **II.A. Innovative networking**

- *Innovative knowledge resulting from COST networking through the Action. (Specific examples of Results vs. Objectives)*
- *Significant scientific breakthroughs as part of the COST Action. (Specific examples)*
- *Tangible medium term socio-economic impacts achieved or expected. (Specific examples)*
- *Spin off of new EC RTD Framework Programme proposals/projects. (List)*
- *Spin off of new National Programme proposals/projects. (List)*

Nothing to report so far.

### **II.B. Inter-disciplinary networking**

- *Additional knowledge obtained from working with other disciplines within the COST framework. (Specific examples)*
- *Evaluation of whether the level of inter-disciplinarity is sufficient to potentially provide scientific impacts. (Specific examples)*
- *Evaluation of whether the level of inter-disciplinarity is sufficient to potentially provide socio-economic impacts. (Specific examples)*

Even though the Action just started, groups highly skilled in digital design and fault tolerance are exploiting new research path in collaboration with groups more specialized in mathematics (for instance the group of Osnat Karen in Israel).

### **II.C. New networking**

- *Additional new members joining the Action during its life.*
- *Total number of individual participants involved in the Action work. (Number of participants. Give % of female and of Early Stage Researcher participants)*
- *Involvement of Early Stage Researchers in the Action, in particular with respect to STSMs, networking activities, and Training Schools. In addition, justification should be provided if less than 4 STSMs were carried out during the year.*
- *Involvement of researchers from outside of COST Countries. (Number of participants from non-COST Countries approved by the CSO. Give % of such participants from countries with reciprocal agreements. Specify their contribution)*
- *Advancement and promotion of scientific knowledge through publications and other outreach activities. (Number of publications and other outreach activities that resulted from COST networking through the Action. Complete list should be given in an annex)*
- *Activities and projects with COST network colleagues.*
- *The capacity of the Action members to raise research funds.*

*The following activities have been carried out in these first months of the Action:*

- Iliia Polian (Action Vice-Chair) presented an invited talk at the workshop WRTLTL'12 in Niigata ([http://www.ieee-wrtilt.org/2012/wrtilt12\\_keynoteinvitedinfor.html#in1](http://www.ieee-wrtilt.org/2012/wrtilt12_keynoteinvitedinfor.html#in1)) titled: "TRUDEVICE: a COST Action in Europe" to present this Action. Moreover, he organized a special session on security during the VLSI Test Symposium, held in Berkeley (California, USA), on April 29<sup>th</sup> - May 2<sup>nd</sup>. The title of the session is "Counterfeit IC Identification: How can Test help?". This session focuses on 2 WGs of the Action (WG1 and WG2).
- A special session on "EU Project Information" is organized during the European Test Symposium. In this context, Giorgio Di Natale (Action Chair) will give a presentation on COST Actions in general and, in particular, on the Action IC1204 (the paper that will be included in the informal digest of the symposium is in annex under the name "Annex 1 - ETS Presentation").
- The 1<sup>st</sup> workshop will be organized on May 30-31. We expect between 40 and 50 attendees. The preliminary program is in annex under the name "Annex 2 - TRUDEVICE Workshop Program". The workshop attracted a substantial number of papers, including some outside the COST Action, and we hope to integrate new members into the Action
- The website of the Action is under construction ([www.trudevice.com](http://www.trudevice.com))
- STSMs have been promoted during the conference DATE (Design, Automation, Test in Europe). This conference has more than 800 attendees. The flyer we prepared for the STSM is in annex to this report ("Annex 3 - STSM Flyer")
- 2 STSMs are setting up

## **II.D. Self evaluation**

- *Indicate in no more than 1 page what, in the opinion of the MC, were the main successes, drawbacks (if any) and the key difficulties encountered (if any).*

## **III. Previous scientific report(s)**

- *Part II of past periods' reports are to be found here.*