PROJECT PERIODIC REPORT

Grant Agreement number: 261679

Project acronym: CONTAIN

Project title: Container Security Advanced Information Networking

Funding Scheme: Collaborative

Date of latest version of Annex I against which the assessment will be made: 05/11/2014

Periodic report: **1st ☐ 2nd ☐ 3rd ☑ 4th ☐**

Period covered: **from 01/10/2013 to 31/03/2015**

Name, title and organisation of the scientific representative of the project's coordinator[1]:

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[1] Usually the contact person of the coordinator as specified in Art. 8.1. of the Grant Agreement.

[2] The home page of the website should contain the generic European flag and the FP7 logo which are available in electronic format at the Europa website (logo of the European flag: http://europa.eu/abc/symbols/emblem/index_en.htm logo of the 7th FP: http://ec.europa.eu/research/fp7/index_en.cfm?pg=logos). The area of activity of the project should also be mentioned.

Declaration by the scientific representative of the project coordinator

I, Dr. Joel Brynielsson, as scientific representative of the coordinator of this project and in line with the obligations as stated in Article II.2.3 of the Grant Agreement declare that:

- The attached periodic report represents an accurate description of the work carried out in this project for this reporting period;
- The project (tick as appropriate)[3]:
  - ☑ has fully achieved its objectives and technical goals for the period;
  - ☐ has achieved most of its objectives and technical goals for the period with relatively minor deviations;
  - ☐ has failed to achieve critical objectives and/or is not at all on schedule.
- The public website, if applicable:
  - ☑ is up to date
  - ☐ is not up to date
- To my best knowledge, the financial statements which are being submitted as part of this report are in line with the actual work carried out and are consistent with the report on the resources used for the project (section 3.4) and if applicable with the certificate on financial statement.
- All beneficiaries, in particular non-profit public bodies, secondary and higher education establishments, research organisations and SMEs, have declared to have verified their legal status. Any changes have been reported under section 3.2.3 (Project Management) in accordance with Article II.3.f of the Grant Agreement.

Name of scientific representative of the Coordinator: Joel Brynielsson

Date: 23/10/2015

For most of the projects, the signature of this declaration could be done directly via the IT reporting tool through an adapted IT mechanism and in that case, no signed paper form needs to be sent.

[3] If either of these boxes below is ticked, the report should reflect these and any remedial actions taken.

3.1 Publishable summary

CONTAIN is aimed at specifying and demonstrating a European Shipping Containers Surveillance system in a global context which will encompass regulatory, policy and standardisation recommendations, new business models and advanced container security management capabilities. The CONTAIN system will:

1. Support transport security stakeholders (both business and administrations) in managing container security threats within logistic chains as part of an integrated approach to the efficient management of Door to Door (D2D) transportation networks;
2. Provide a coherent set of 'best of breed', cost effective and efficient technology options for container-integrated sensor, communication and security hardware and software technologies to monitor container movements and security and business related parameters in real time, whilst addressing the technology, implication of and links to screening and detection technologies;
3. Enable ports and transport networks to establish cost effective upgraded container security processes (including technologies and integration of ICT applications with customs agents and National Security Forces) and to optimise operational processes both in terms of security performance and efficiency and quality of container transport services;
4. Provide added value to key investments made by EU customs organisations to achieve higher levels of protection of markets and society and to offer favourable conditions for business development focusing on improved real time risk evaluation and control;
5. Provide appropriate information gathering, validation, fusion and situational awareness services to establish dependable near real time 'corridor container traffic maps' and their integration into a EU Container Traffic Map for use by organisations and systems established to promote and implement an integrated EU surveillance policy;
6. Enable the establishment of secure trade lanes between the EU and selected trading partners;
7. Assist policy makers at national and EU level to promote container security based on sound economic and technological argumentation and to benchmark container security performance in order to formulate improvement policies;
8. Facilitate the further development of European standards to address and improve container security specifically and supply chain security in general and progress towards a single international shipping containers security standard.

During the final phase of the project, which is reported on herein, the project results have been implemented and demonstrated through three demonstrators taking place in Genoa, Valencia, and Bologna. The demonstrators in Genoa and Valencia were focused on specific applications whilst the Bologna demonstrator served to integrate and demonstrate the entire CONTAIN system. The Genoa demonstrator focused particularly on monitoring of container position and door integrity, whilst the Valencia demonstrator focused on detection and management of empty containers. In Bologna, a demonstration of the supply chain security and management improvements along two global supply chain corridors with Bologna as the hub was performed. Alongside the demonstration activities, an assessment of the project has been performed, where the project was critically assessed according to the aim of the project compared to what was actually demonstrated. Finally, a final conference was arranged in order to learn from the assessment, identify open issues, and discuss future directions.

3.2 Core of the report for the period: Project objectives, work progress and achievements, project management

3.2.1 Project objectives for the period

The project objectives for the final phase of the project were to finalize and submit all deliverables, to demonstrate the project results during three separate demonstration activities, and to assess the applicability of the project outcomes.

The second year review meeting took place in Valencia in January 2014. The project was considered to be well on track in terms of delivering "a perfect platform where all necessary information comes together" and providing "the best sensors." The project was, however, recommended to also consider existing procedures in order to propose how these ought to change, rather than solely describing completely new best practices. This has been addressed during the reporting period through the organization of the final demonstrations in general, and the final users' event in Bologna on March 6, 2015 in particular.

3.2.2 Work progress and achievements during the period

This section provides an overview of the progress of the work performed during the reporting period, which is presented according to the structure of Annex I to the Grant Agreement.

WP1 – EU Containers Surveillance Framework (ECSF)

T1.5 entitled "EU Containers Surveillance Framework (ECSF) Specification" was the only WP1 task active in the period. The objective of this task was to develop the EU Containers Surveillance Framework (ECSF) Specification to provide a common understanding and interpretation of the CONTAIN approach towards "monitoring and tracking shipping containers." ECSF will be composed of specifications for legal, policy, strategic management, technology, standardisation, risk management and operational concepts and processes pertaining to an upgraded European container transport system with quantified targets for improvements and benefits. It will provide a logical description of container security "services" that will support different stakeholders to meet their responsibilities and the information that has to be exchanged between these services. It will also provide implementation strategies with specific reference to change management and human factors.

Throughout the project, several iterations of the ECSF have been produced (under the leadership of IBI as task leader). The final version produced at the end of this period takes into account the outcomes and results of the demonstrators and further incorporates stakeholder feedback from the demonstrator, evaluation workshop and final review meetings. The final ECSF is available in deliverable D1.5. The ECSF constitutes a formal documentation of different facets of container security which will be made available to the industry stakeholders. It covers various dimensions, including sensing and monitoring technologies, information exchange, risk assessment, situational awareness, decision support and "green" corridors.

WP2 – Upgraded Container Monitoring Solutions

Work package 2 is divided into four tasks. Below a short summary of the activities that were part of each task along with a short summary of their progress can be found.

T2.1 Library of container security sensor and communication technologies

The task has been carried out as described in the DoW. The work done in WP1 has served as the guideline for this task, as requested in the DoW. The ICT architecture for the sensor library was proposed by Selex ES. Selex ES created a relational database in order to store the sensor library

data. EBOS created a GUI web application in order to feed the database created by Selex ES with sensor library data. Then, an account (user/password) was supplied to each company/user involved in the project in order to log in to the sensor library, add records or simply browsing the sensor library content. Also with reference to time schedule, the task ran as expected.

T2.2 Solutions options for scanning and screening of containers during handling stages
The task has been carried out as described in the DoW. CTY proposed the way of proceeding during the early stages of the project at the WP2 kick-off meeting in Rome in September 2012. A list of ports selected for collaboration with CONTAIN was proposed. After the meeting the port authorities of these ports were contacted, the CONTAIN project was presented, and some of the ports expressed interest in the CONTAIN project. With reference to the DoW, the final deliverable related to T2.2 was written by SE instead of CTY as it was initially planned according to the DoW. Even with this deviation with reference to the DoW in mind, the task ran as expected and the first release of deliverable D2.2 was prepared by SE within the expected time frame.

T2.3 Localisation and communication reference solution
The task has been carried out as described in the DoW. Telespazio acted as responsible for the task and acted as coordinator for activities carried out by other partners (Novacom, for example). The OBU unit work was carried out within the time expected. At the end of the project, the OBU unit was classified by the CONTAIN reviewers as being ready for the market, and this is one of the best achievements of the CONTAIN project. As planned, the OBU unit was demonstrated during the final event of the CONTAIN project (the EWM Demo in March 2015).

T2.4 Container–integrated sensor and communications design
Thales UK carried out the task as described in the DoW. A CSD (container security device) was constructed according to the specifications needed for the CONTAIN project. In the early stages of the project some issues were faced (e.g., battery consumption of the CSD was an issue) but later during the project these issues have been solved. At the end of the project, the CSD device was classified by the CONTAIN reviewers as a proof of concept. As planned, the CSD device was demonstrated during the final event of the CONTAIN project (the EWM Demo in March 2015).

WP3 – Situational Awareness Support Platform

All deliverables have been produced, and all milestones according to the DoW have been achieved. More precisely, WP3 aimed at producing a situational awareness support platform. This platform is a flexible and scalable system that fuses information as part of an EU containers surveillance system. Specifically, WP3:

1. Specified a "Container Traffic Flow Information Management multilayer Architecture" which is based on the ECSF and further specifies information interchanges and controls between stakeholders at different levels;
2. Developed a base platform with a repository and registry for container surveillance models and services;
3. Developed communications and information security and quality control systems supporting the entire process end-to-end: from container data collection based on remote sensors and distributed databases, to data storing, to analysis and to processing raw data into dynamic information;
4. Developed and tested a semantic toolset which supports interoperability and services management and enables resolution of interoperability conflicts (on container movements and security related data, events, and services) and provides design time mechanisms to support automated integration of services by semantics based discovery;
5. Developed situational awareness services that use the CONTAIN information sharing environment and shows relevant to security information on a map, thus feeding the decision support services;

6. Analysed potential standardisation activities focused on the common information sharing environment, communications security and the semantic toolset.

The most important results of WP3 during this final period include the following:

- The final version of deliverable D3.1, "Architecture for Container Traffic Flow Information Management," was developed and submitted. D3.1 provides the CONTAIN system architecture in line with the ECSF specification. The final version describes the architecture of the container traffic flow information management taking into account all of the work done during the CONTAIN project lifetime since the first version was submitted. This final version entails feedback from the demonstrator efforts put forward in WP5 and more precisely reports the feedback obtained in terms of changing the original architecture. Based on the results and on the demo activities, the originally envisaged architecture is appropriate for the objectives set and may serve as a basis for further developing the green lanes/corridors concept in terms of security and safety.
- The final version of deliverable D3.2, "Base Platform – Repository and Registry for Models and Services," was also submitted during this last reporting period. More precisely, the final version of D3.2 provides the base platform to satisfy the architecture specified in D3.1. During this last period, extensive real life tests were performed and the reliability and effectiveness of the platform were successfully tested by CONTAIN's business partners (within and outside the consortium).
- The final version of deliverable D3.3, "Situational Awareness Services," was also prepared and successfully submitted during the period. D3.3 provides the prerequisites for developing data fusion tools to deal specifically with multivariate container data in order to feed situational awareness services to the decision support services including the ConTraffic system. More precisely, this deliverable describes the work to define and implement support services for the decision support tools in WP4. The main contribution, which is rather innovative for container security, was the ENS/CRS simulator: a software that uses machine learning for customs threat classification. In addition, a general description of the prerequisites for the data fusion services, i.e., CustAware and DSSLog, was also presented.
- Deliverable D3.4, "Semantic Toolset for Interoperability and Services Management," was also successfully submitted. This deliverable presents the main motivations and benefits of using formal meta models – or "semantic technology" – in the CONTAIN project. It describes the CONTAIN ontology and connecting technologies/tools that support the design, implementation and maintenance of complex, evolving systems, such as those concerned with the notion of "CONTAIN." Additionally, this deliverable is innovative in terms of extending the state-of-the-art of the "Smart Semantic Space" (SSS), a system co-ordinating knowledge-based processes relating to container security. Correct reasoning and inference on the security situation can only be made when the right knowledge is available at the right time. In a domain with many independent but interacting software agents, co-ordination, communication and sharing of knowledge is a challenge. The SSS was realised in a manner which decouples the agents in both space and time, allowing multiple users to simultaneously access and contribute to a co-ordinated container security data store, enabling all users to benefit from a collaborated and connected web of container security information.
- Deliverable D3.5, "Communications and Information Security," provides a flexible security architecture covering the whole CONTAIN system, the communications between the container devices, and the infrastructure and information flows between stakeholders as defined in the ECSF. D3.5 provides multi-level information security solution options that satisfy the architecture linked to the CONTAIN platform. D3.5 offers the following novelties:

    - A system-wide security assessment. Beginning with a high-level system definition, the team identified the assets at risk and defined system security domains representing categories of assets with similar sensitivity. Three domains were defined: a commercial domain for assets representing competitive advantage, a business critical domain for all assets that have an impact on business continuity, and a public authority domain for all assets that impact on regulatory or national security concerns. Threat sources and actors were then identified, where sources are the instigators of potential attacks, and actors are those carrying out aspects of the attacks. The respective risk levels were also assessed for each security domain to inform the severity of the risk and inform the strength of the defence mechanisms required.
    - A comprehensive CONTAIN approach to fulfilling the requirements derived for the EU containers surveillance system. This approach exploits content-based security (CBS) to address the most stringent requirements related to cross-security domain interactions. Additionally, the CONTAIN functional capability of CBS was described in terms of mapping the EU Containers Surveillance system security requirements to the CBS features.
- Deliverable D3.6, "Standardization requirements and development strategies," includes efforts by all relevant partners (CTY, TL UK, eBOS, BMT, FOI, and ILS) to understand and propose standardization options. More precisely, CONTAIN's WP3 activities include a standardisation effort, in order to propose to the European Commission ways towards building a unified view of the systems that are participating in this domain. It goes without saying that standards improve the synergies between the research, industry and government and improve the "virtuous circle" of innovation by removing technical barriers to the development of new products and services. This report covers the following sections: (a) CONTAIN Information Security Architecture Standards, Extensions, and Standardisation, (b) ECSF and CTFIM Messages, (c) Future Standardization efforts: UBL Transport Committee, (d) OASIS Transport Subcommittee, (e) Other relevant Standardization efforts, and finally (f) Single Windows.

WP4 – Decision Support Services

During the period, final versions of deliverables have been submitted, and the decision support system prototypes have been finalized and demonstrated. These systems include the CustAware risk management system for customs, the incident management decision support system for logistics (DSSLog), the Transport Decision Support System (TDSS) providing optimization services to container operators, and the Assessment and Benchmarking (A&B) tool.

WP5 – Business Cases and Demonstrators

WP5 dealt with the organization of full scale demonstrators for CONTAIN-based solutions, in order to evaluate the feasibility of the CONTAIN approach in acquiring and handle container data and assess the potential benefits coming from the project outputs. Specific objectives of this WP were:

1. the provision of a plan for the demonstrators exploitation and the associated evaluation criteria and assessment methodology;
2. the organization of the foreseen demonstrators in Bologna, Genoa, and Valencia;
3. the provision of evaluation, cost-benefit analysis, and recommendations coming from the demonstrators experience.

WP5 has been an integral part of the project development activities, with a special emphasis on the development of the following demonstrators:

- the EAST WEST MED Demonstrator, focusing on Bologna as a hub,

- the Genoa Port Hub demonstrator,
- the Valencia demonstrator.

Initial activities in WP5 were based on inputs obtained from the EAST WEST MED AS-IS analysis, thus involving the provision of business process maps, threat and loss analysis for security existing gaps, and identification of transport chain black spots.

The initial task in WP5 concerned the demonstrators planning and had to ensure that all demonstrator activities and purposes were properly described, thus involving the related process models and the detection of risks and black spots. The main purpose of this task was to gather the project and users requirements and draw the path towards the implementation of the CONTAIN "to be" model. This process was conducted by cross fertilization with WP2, WP3, and WP4. The final task 5.1 output is the provision of the updated CONTAIN demonstrators plan. On the basis of input provided from the EAST WEST MED Demonstrator, task 5.1 developed the AS-IS business process model (IDEF0 + BPM) and identified the potential risk management issues and the potential black spots (identified through the bow-tie analysis performed in task 1.2). Task 5.1 drafted the demonstrator and user requirements towards the assessment and implementation of technologies and inputs (from all WPs) to be exploited in the demonstrators.

The central WP5 tasks were devoted to the development of the specific demonstrator activities according to the following:

- The EAST WEST MED Demonstrator aimed to provide end-to-end security container management by supporting transport security stakeholders (both business and administrations) with managing container security threats within logistic chains through utilising "best of breed" technology options as part of an integrated approach to the management of Door to Door (D2D) transportation networks. The EAST WEST MED corridor run from the Port of La Spezia to Bologna Interporto Hub, and it was extended to the Ravenna port. Bologna Interporto is a central hub acting as the backyard of the ports of Ravenna, La Spezia and Leghorn and as an inland terminal and gateway-system for intermodal services leading to southern ports of Taranto, Bari, and Naples. The EAST WEST MED demonstrator provided the transport corridor and chain element to the HINTERMED Demonstrator and consequently to the CONTAIN project.
- The Genoa demonstrator had the scope of monitoring the container traffic between the Voltri Terminal (VTE) and the Rivalta Terminal (RTE) (Inland Terminal) that is operated by rail and road. Container data related to eSeal status and train composition (number of wagons and containers carried on each wagon) were acquired in both locations and the acquired data was processed and verified by the CONTAIN situational awareness support platform: alarms deriving from potential delays and status messages were then generated by the CONTAIN decision support services, and a container traffic control centre in Genoa acted as a typical CONTAIN user querying the CONTAIN platform through the web.
- The Valencia demonstrator design included the use of different technologies and devices for detection of empty containers, the creation of a hardware solution, and the development of software being able to manage, process and analyse all the signals, images and data received from the different detectors (infrared cameras, laser beams, etc.) as well as to present the results of the scanning in a user-friendly operator interface. The objective of the Valencia port demonstrator was also to establish cost-effective upgraded processes for tracking of container movements and to provide information feeds to supply chain planning services (linked to the Valencia Port Community System).

Finally, task 5.4 has provided a consolidated evaluation of the whole demonstrators programme for the various CONTAIN demonstrator phases, also including a cost-benefit analysis. Furthermore, conclusions and recommendations for key improvements of container transport chain security across Europe and implications on exploitation strategies were drafted.

In WP5, the demo activities have been defined and planned, and then exploited and assessed within the various tasks. With regard to the demo implementation, the HINTERMED demonstrator (involving Genoa and Bologna) acted as a testbed for the whole CONTAIN solution. In this context, it was possible to perform the analysis of key issues arising from interdependencies among the various components of the container transport chains and to establish the ECSF requirements and prove the ECSF applicability to the demonstrator context.

In the Genoa demo context, it was demonstrated that the adoption of an instrument/device capable of automatic detection of the containers entering a terminal – the SECH Terminal at the Genoa Port in this case – and the possibility to crosscheck the detected data with the expected ones, could be an improvement of the quality of the operations carried out at the terminal itself. Furthermore, thanks to the CONTAIN Platform, the possibility to have an alarm pointing out that a container is not detected on the expected path can be very useful for the transport stakeholders because they are informed in "real time" about the unexpected event.

As part of the HINTERMED framework, the EWM demonstrator made it possible to link security issues with the logistics aspects of a container transport chain. Various services and messages were integrated and demonstrated in the EWM scenario (sensing data collected through an interface to the container monitoring solutions, with the exploitation of the CSD, the EGNOS OBU, eSeals and the proof of concept for CBRNe Sensors; decision support services which might propose scenarios and suggestions regarding potential security threats within corridors, with A&B and DSSLog; decision support services which might suggest at strategic level potential security threats within transport chains in order to initiate planning and re-planning activities, with CustAware and ConTraffic; semantic toolset services to support information exchange and interoperability between transport network systems and the CONTAIN platform, with the SSS application; communication security services to ensure communications where required, with the proof of concept of the TH UK technology) and a two-way interfacing with the CONTAIN platform through an API for transport networks was implemented, with the provision of services and logistics information from the IBI platform to the CONTAIN platform. Then, it was demonstrated that the CONTAIN solution can in the end provide a fully instrumented container with the means and tools for its self-protection.

At Valencia Port a demonstration of an upgraded monitoring solution for empty containers and the exploitation of a decision support system developed by MJC2 was organized. The demonstrator held in Valencia on January 21, 2015 combined both simulation and real actions involving risk assessment and evaluation, physical inspection of empty containers within the port as well as track and trace monitoring of trucks performing routes outside the port.

Throughout the CONTAIN demonstrations, it was also demonstrated that application of the CONTAIN concepts may represent a potential solution of conflict between interests arising among the actors and stakeholders within the container transport chain, by allowing both the public authorities and the business actors to achieve advantages. The possibility of having a single access point for obtaining security information along the transport chain can be helpful in terms of choosing the appropriate controls at, e.g., interchange points. Furthermore, the enhancement of information distribution and sharing can help increasing the awareness of the logistics/security conditions for cargo managers/administrations.

WP6 – Dissemination, Standardisation, and Exploitation Planning

The primary objective of work package 6 is the implementation of a dissemination plan which ensures that the results of CONTAIN are used as effectively as possible. During the reporting period, the CONTAIN results was continuously presented at the CONTAIN blog and website, and various kinds of material supporting the demonstrators have been produced. In particular, a number of video snippets supporting the demonstrators were produced. These videos were published on YouTube and linked to through the CONTAIN website and contained interviews with stakeholders and project partners as well as demonstrations of the CONTAIN system and its implications.

Specific highlights from a dissemination point of view include the successful stakeholder meeting in Bologna on March 6, 2015, and the CONTAIN final event where positive feedback was obtained from the project officer, the project reviewer, and DG TAXUD, to mention a few. Also, all WP6 deliverables have been finalized and submitted.

3.2.3 Project management during the period

Much of the management activities during the last phase of the project has been devoted to finalizing the project in terms of managing and supporting the demonstrator activities, organizing the final events of the project, and editing final versions of the deliverables produced throughout the project.

A third amendment to the grant agreement was submitted and accepted by the European Commission during the reporting period. Among other things, this amendment concerned a change of the project coordinator person, rearrangement of tasks, changes of task content as a result of discussions with stakeholders, and reallocation of budget as a result of a redistribution of work between the partners.

Meetings

Kick-off in Bologna, October 2011
Meeting in Amsterdam, January 26, 2012
Meeting in Brussels, February 1, 2012
Several meetings in Italy, January–March, 2012
Meeting in Delft, May 9–10, 2012
Meeting in London, May 15, 2012
Meeting in Brussels, June 12, 2012
CONTAIN workshop in Brussels, June 18, 2012
Meeting in Brussels, June 19–20, 2012
Meeting in Stockholm, August 30–31, 2012
Meeting in Rome, September 19–20, 2012
Meeting in Stockholm, September 6–7, 2012
Meeting in Gothenburg, October 2012
Meeting in Stockholm, November 2013
Review meeting in Stockholm, November 2013
Meeting in Brussels, June 2013
Meeting in London, October 6–7, 2013
Advisory board meeting in London, October 8, 2013
Meeting with Swedish customs, October 17, 2013
Meeting in Stockholm, October 23, 2013
Review meeting in Valencia, January 24, 2014
Meeting in Stockholm, April 15, 2014
Meeting in Stockholm, May 6, 2014
Demonstrator preparation meeting in Bologna, May 26–30, 2014

Advisory board meeting in Bologna, June 3, 2014
Meeting in Helsinki, August 28, 2014
Meeting in Cyprus, September 16–17, 2014
Genoa demonstrator, stakeholder forum workshop, and advisory board meeting, December 10, 2014
Valencia demonstrator, January 21, 2015
EWM demonstrator rehearsal meeting in Bologna, March 4, 2015
EWM demonstrator and final event in Bologna, March 5–6, 2015
Assessment workshop in Brussels, March 12, 2015
Final meeting/conference in Brussels, March 25, 2015
Wrap-up meeting with the European Commission in Brussels, March 26, 2015

3.3 Deliverables and milestones

All deliverables have been submitted to and accepted by the European Commission, and all milestones have been achieved as per the specification in Annex I to the Grant Agreement.

3.4 Explanation of the use of the resources and financial statements

Explanation of the use of the resources has been made in Form C in the Participant Portal.

CONTRACT N°:	261679	Partner – Person-month per Workpackage																			
ACRONYM:	CONTAIN																				
PERIOD:	M25–M42 Oct. 13 – Mar. 15	TOTAL	1. FOI	2. BMT	3. CTY[4]	4. ILS	6. JRC	7. SE	8. TL	9. TPZ	10. MARLO	11. NOVACOM	12. VTT	13. MJC2	14. eBOS	16. EOS	22. VPF	21. Sogemar	19. AD	20. TL IT	23. IBI
WP1, RTD	**Actual WP total:**	**21,42**	**7,93**	**0,00**	**0,06**	**3,90**	**0,00**	**0,26**	**0,00**	**1,09**	**3,21**	**0,00**	**0,00**	**1,75**	**0,00**	**0,00**	**0,00**	**0,53**	**0,10**	**0,00**	**2,59**
Start M1, End M34	**Planned WP total:**	**138,34**	*15,00*	*16,00*	*4,50*	*12,00*	*6,00*	*11,00*	*3,00*	*5,51*	*7,00*	*0,00*	*8,00*	*4,00*	*1,00*	*3,71*	*3,50*	*2,00*	*3,00*	*3,00*	*11,64*
WP2, RTD	**Actual WP total:**	**63,71**	**5,89**	**0,00**	**0,55**	**0,00**	**0,00**	**11,03**	**2,30**	**16,45**	**0,00**	**0,50**	**8,60**	**0,00**	**0,00**	**0,00**	**1,49**	**0,00**	**1,10**	**10,33**	**5,47**
Start M7, End M34	**Planned WP total:**	**172,10**	*9,50*	*0,00*	*2,50*	*4,00*	*0,00*	*46,00*	*22,00*	*24,60*	*0,00*	*17,00*	*12,00*	*1,00*	*5,00*	*0,00*	*3,50*	*0,00*	*4,00*	*13,00*	*8,00*
WP3, RTD	**Actual WP total:**	**143,45**	**9,30**	**36,20**	**0,00**	**8,49**	**0,00**	**2,57**	**16,36**	**2,00**	**0,00**	**5,30**	**0,00**	**4,00**	**52,85**	**0,00**	**2,63**	**0,00**	**0,30**	**3,20**	**0,25**
Start M4, End M38	**Planned WP total:**	**184,00**	*24,49*	*24,00*	*0,00*	*12,00*	*3,00*	*7,00*	*18,00*	*3,00*	*0,00*	*8,00*	*0,00*	*15,00*	*42,00*	*0,00*	*2,00*	*0,00*	*2,00*	*15,00*	*8,00*
WP4, RTD	**Actual WP total:**	**122,04**	**37,67**	**0,00**	**0,00**	**11,74**	**15,87**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**8,60**	**14,00**	**1,07**	**0,00**	**8,38**	**1,42**	**0,30**	**0,00**	**23,00**
Start M12, End M40	**Planned WP total:**	**148,87**	*22,00*	*4,00*	*0,00*	*19,00*	*15,00*	*0,00*	*0,00*	*0,00*	*6,00*	*0,00*	*5,50*	*30,00*	*9,00*	*0,00*	*5,25*	*2,45*	*3,00*	*0,00*	*27,50*
WP5, DEM	**Actual WP total:**	**237,57**	**19,19**	**9,00**	**1,81**	**3,65**	**26,55**	**18,21**	**14,03**	**7,23**	**14,33**	**5,10**	**3,00**	**14,00**	**27,89**	**0,00**	**14,06**	**10,60**	**2,30**	**17,46**	**29,17**
Start M1, End M42	**Planned WP total:**	**261,34**	*12,80*	*8,00*	*1,80*	*12,00*	*15,00*	*23,00*	*7,00*	*28,24*	*20,00*	*12,80*	*3,00*	*16,00*	*11,00*	*0,00*	*26,25*	*10,45*	*3,00*	*12,00*	*37,37*
WP6, RTD	**Actual WP total:**	**58,17**	**1,98**	**2,10**	**4,16**	**0,10**	**0,66**	**3,30**	**1,05**	**14,99**	**4,55**	**2,33**	**3,00**	**1,25**	**0,27**	**10,21**	**0,00**	**0,37**	**1,00**	**6,16**	**0,69**
Start M1, End M42	**Planned WP total:**	**86,00**	*2,50*	*3,00*	*5,00*	*1,00*	*3,00*	*5,00*	*1,50*	*12,81*	*12,00*	*3,00*	*2,50*	*2,00*	*7,00*	*9,38*	*3,25*	*0,50*	*3,00*	*4,50*	*5,00*
WP7, MGT, OTH	**Actual WP total:**	**31,62**	**17,88**	**4,40**	**8,11**	**0,00**	**0,00**	**0,53**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,59**	**0,00**	**0,00**	**0,00**	**0,00**	**0,11**
Start M1, End M42	**Planned WP total:**	**57,80**	*21,30*	*4,00*	*20,00*	*4,00*	*0,00*	*4,00*	*0,00*	*0,00*	*0,00*	*0,00*	*0,00*	*0,00*	*0,00*	*0,50*	*0,00*	*0,00*	*0,00*	*0,00*	*3,25*
Total Project Person-month	**Actual total:**	**677,97**	**99,84**	**51,70**	**14,68**	**27,88**	**43,07**	**35,90**	**33,74**	**41,76**	**22,09**	**13,23**	**23,20**	**35,00**	**82,08**	**10,80**	**26,56**	**12,92**	**5,10**	**37,15**	**61,28**
	Planned total:	**1 048,45**	**107,59**	**59,00**	**33,80**	**64,00**	**42,00**	**96,00**	**51,50**	**74,16**	**45,00**	**40,80**	**31,00**	**68,00**	**75,00**	**13,59**	**43,75**	**15,40**	**18,00**	**47,50**	**100,76**
	% spent:	**65%**	**93%**	**88%**	**43%**	**44%**	**103%**	**37%**	**66%**	**56%**	**49%**	**32%**	**75%**	**51%**	**109%**	**79%**	**61%**	**84%**	**28%**	**78%**	**61%**

[4] Preliminary figures.

FP7 - Grant Agreement - Annex VI - Collaborative project

Summary Financial Report - Collaborative project

Project acronym	CONTAIN	Project nr.	251679	Reporting period from	01/10/2013	to	31/03/2015	Page	1/2

Funding scheme	CP

Beneficiary nr.	If 3rd Party, linked to beneficiary	Adjustment (Yes/No)	Organization Short Name	Type of activity								Total (A)+(B)+(C)+(D)		Receipts	Interest
				RTD (A)		Demonstration (B)		Management (C)		Other (D)					
				Total	Max EU Contribution	Total	Max EU Contribution	Total	Max EU Contribution	Total	Max EU Contribution	Total	Max EU Contribution		
1		Yes	FOI	7,867.02	5,900.27	941.24	470.62	1,293.43	1,293.43	0.00	0.00	10,101.69	7,664.32	0.00	0.00
1		No	FOI	1,012,476.22	759,357.17	302,848.54	151,424.27	239,810.66	239,810.66	76,607.95	76,607.95	1,631,743.37	1,227,200.05	0.00	0.00
2		No	BMT	810,892.81	405,446.41	204,780.16	102,390.08	3,740.56	3,740.56	94,264.76	94,264.76	1,113,678.29	605,841.81	0.00	0.00
2		Yes	BMT	-8,145.89	-4,072.95	0.00	0.00	0.00	0.00	0.00	0.00	-8,145.89	-4,072.95	0.00	0.00
3		No	CTY | DRAFT	88,622.56	66,466.92	0.00	0.00	0.00	0.00	164,313.60	164,313.60	252,936.16	230,780.52	0.00	0.00
4		No	ILS	335,496.24	251,622.18	39,064.00	19,532.00	0.00	0.00	0.00	0.00	374,560.24	271,154.18	0.00	0.00
6		No	JRC	215,899.84	161,924.88	312,103.15	156,051.58	2,400.00	2,400.00	0.00	0.00	530,402.99	320,376.46	0.00	0.00
6		Yes	JRC	2,305.86	1,729.40	0.00	0.00	0.00	0.00	0.00	0.00	2,305.86	1,729.40	0.00	0.00
6		Yes	JRC	5,917.62	4,438.22	0.00	0.00	0.00	0.00	0.00	0.00	5,917.62	4,438.22	0.00	0.00
7		Yes	SES	9,259.49	4,629.75	4,202.47	2,101.24	0.00	0.00	1,623.16	1,623.16	15,085.12	8,354.15	0.00	0.00
7		No	SES	184,764.27	92,382.14	214,050.79	107,025.40	0.00	0.00	5,282.32	5,282.32	404,097.38	204,689.86	0.00	0.00
-7		Yes	SE	-5,781.93	-2,890.97	0.00	0.00	0.00	0.00	0.00	0.00	-5,781.93	-2,890.97	0.00	0.00
-7		Yes	SE	-2,648.45	-1,324.23	-555.42	-277.71	0.00	0.00	-257.48	-257.48	-3,461.35	-1,859.42	0.00	0.00
8		No	TL	292,049.79	146,024.90	224,869.32	112,434.66	3,431.71	3,431.71	0.00	0.00	520,350.82	261,891.27	0.00	0.00
8		Yes	TL	-11,724.03	-5,862.02	-296.43	-148.22	0.00	0.00	0.00	0.00	-12,020.46	-6,010.24	0.00	0.00
9		Yes	TPZ	2,083.44	1,041.72	-1,401.22	-700.61	0.00	0.00	0.00	0.00	682.22	341.11	0.00	0.00
9		Yes	TPZ	-30,109.62	-15,054.81	-4,575.37	-2,287.69	0.00	0.00	0.00	0.00	-34,684.99	-17,342.50	0.00	0.00
9		No	TPZ	370,955.46	185,477.73	60,939.63	30,469.82	4,900.00	4,900.00	0.00	0.00	436,795.09	220,847.55	0.00	0.00
10		No	MARLO	179,391.66	134,543.75	227,053.49	113,526.75	0.00	0.00	0.00	0.00	406,445.15	248,070.50	0.00	0.00
11		No	NOVACOM	88,264.68	44,132.34	54,492.48	27,246.24	0.00	0.00	0.00	0.00	142,757.16	71,378.58	0.00	0.00
12		No	VTT	302,923.85	227,192.89	54,276.93	27,138.47	1,966.07	1,966.07	0.00	0.00	359,166.85	256,297.43	0.00	0.00
12		Yes	VTT	1,989.26	1,491.95	0.00	0.00	0.00	0.00	0.00	0.00	1,989.26	1,491.95	0.00	0.00
13		Yes	MJC2	16,775.97	12,581.98	0.00	0.00	0.00	0.00	0.00	0.00	16,775.97	12,581.98	0.00	0.00
13		Yes	MJC2	-568.93	-426.70	-29.38	-14.69	0.00	0.00	0.00	0.00	-598.31	-441.39	0.00	0.00
13		No	MJC2	402,482.90	301,862.18	216,354.62	108,177.31	2,739.35	2,739.35	0.00	0.00	621,576.87	412,778.84	0.00	0.00
14		No	eBOS	379,816.53	284,862.40	115,405.60	57,702.80	600.00	600.00	0.00	0.00	495,822.13	343,165.20	0.00	0.00
16		Yes	EOS	-1,144.11	-858.08	0.00	0.00	0.00	0.00	0.00	0.00	-1,144.11	-858.08	0.00	0.00
16		Yes	EOS	-169.09	-126.82	0.00	0.00	0.00	0.00	0.00	0.00	-169.09	-126.82	0.00	0.00
16		No	EOS	98,003.01	73,502.26	6,555.71	3,277.86	0.00	0.00	0.00	0.00	104,558.72	76,780.12	0.00	0.00
19		No	AD	85,893.45	64,420.09	36,203.54	18,101.77	0.00	0.00	0.00	0.00	122,096.99	82,521.86	0.00	0.00
20		No	THALIT	228,446.40	114,223.20	195,516.87	97,758.44	0.00	0.00	0.00	0.00	423,963.27	211,981.64	0.00	0.00
20		Yes	THALIT	16,161.72	8,080.86	0.00	0.00	0.00	0.00	0.00	0.00	16,161.72	8,080.86	0.00	0.00
20		Yes	THALIT	9,935.89	4,967.95	0.00	0.00	0.00	0.00	0.00	0.00	9,935.89	4,967.95	0.00	0.00
21		No	Sogemar	56,455.12	28,227.56	123,834.91	61,917.46	0.00	0.00	0.00	0.00	180,290.03	90,145.02	0.00	0.00
22		No	VPF	116,082.27	87,061.70	131,937.30	65,968.65	0.00	0.00	0.00	0.00	248,019.57	153,030.35	0.00	0.00
22		Yes	VPF	-346.38	-259.79	-400.87	-200.44	0.00	0.00	0.00	0.00	-747.25	-460.23	0.00	0.00
22		Yes	VPF	646.59	484.94	1,451.76	725.88	0.00	0.00	0.00	0.00	2,098.35	1,210.82	0.00	0.00
23		No	IBI	417,597.84	313,198.38	273,075.06	136,537.53	3,500.00	3,500.00	857.65	857.65	695,030.55	454,093.56	0.00	0.00