



Project no: FP6-031486

Project acronym: EFFORTS

Project title: Effective Operations in Ports

Instrument: Integrated Project

Thematic Priority: Integrating and Strengthening the European Research Area

DIV.1.1

Exploitation Plan Guidelines

Due date of deliverable: 30/09/2007

Actual submission date: 14/01/2008

Start date of project: 01/05/2006

Duration: 42 months

Organisation name of lead contractor for this deliverable: TL & Associés

Revision: 0.2

| Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006) |   |          |
|---|---|----------|
| Dissemination Level   |   |          |
| <b>PU</b>   | Public  | <b>x</b> |
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**PROJECT DELIVERABLE**  
**DIV.1.1 – EXPLOITATION PLAN GUIDELINES**

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Issuing entity: TL & ASSOCIÉS  
Document Code: EFFORTS-WPIV.1-DEL-20080114-FINAL-TLA-09-01-  
EXPLOITATION\_PLAN\_GUIDELINES-V0.2.PDF  
Partner Code: 18  
Date of Issue: 19/12/2007  
Status: Final  
Revision: 0.2

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Pages 14  
Figures 0  
Tables 2  
Annexes 2

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Signatures

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## RECORD OF CHANGES

This is a controlled document for any changes and amendments done for the deliverable.

Amendment shall be by whole document replacement.

| Version | Status                        | Date     | Authorized by |
|---------|-------------------------------|----------|---------------|
| 0.1     | Draft version – TCT review    | 06/12/07 |               |
| 0.2     | 2 <sup>nd</sup> draft version | 19/12/07 |               |
|         |                               |          |               |
|         |                               |          |               |
|         |                               |          |               |
|         |                               |          |               |
|         |                               |          |               |

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## 1 Executive summary

This document is the deliverable DIV.1.1 of the EFFORTS project, and it is written as first result of the work done on the horizontal WPIV ("Exploitation, Protection of Knowledge and Dissemination"), task IV.1 ("Exploitation and Implementation").

The exploitation plan is the basis on which EFFORTS partners will concretely discuss about the future ways for exploitation of results, analysing in details the market potentialities, the different products/services which may arise from the EFFORTS project, and preparing a timescale for the next commercial actions.

This document aims to serve the EFFORTS partners in constituting their exploitation plans. In this scope, it provides general guidelines for the elaboration of these business plans, whose framework is described in the associated template.

In more details, next guidelines consider the following aspects:

- The historic of the development;
- The description of the exploitable results (product and/or service);
- The market study, describing the context (notably in terms of international legislation, in particular with regard to liability, insurance and risk level, and in terms of norms and standards both for the acceptance and the certification criteria), the markets (potential size of markets and associated demands), the competitors and highlighting development opportunities;
- The development strategies and action plan, under individual and/or collaborative approaches;
- The associated schedule (timescale for the next commercial actions) and resources organisation;
- Financial forecasts (and indicators to judge of the business-related features of the EFFORTS products/services);
- The analysis of opportunities and threats and of means to mitigate risks, based on a SWOT analysis.

This document is a tool destined to EFFORTS partners to help them to build their own exploitation plans. WPIV team will provide assistance and support in this scope, but business plans can only be elaborated in strong collaboration with the concerned partners.



## 2 Definitions and approach

There is clear evidence that a considerable majority of projects fail in exploiting their outcomes as they do not succeed in identifying their individual purpose in terms of the knowledge produced and technological excellence achieved.

This derives mainly as a result of the actual areas under focus being insufficiently studied (such as who the competitors are, who the other relevant research actors are, the nature of international trends in the area...). To avoid this, an obvious remedy for any partner and therefore any project is to know at each distinct moment:

- Its assets (both tangible and intangible), its competitors, and the market;
- How to express them with the most accurate figures possible.

According to Baruch Lev *"an intangible asset is a claim to future benefits that does not have a physical or financial embodiment. A patent, a brand, and a unique organizational that generate cost savings are intangible assets."* (2001).

The need to evaluate the intangible assets of a project is apparent; especially in the context of the European Union, as since 1994 the EC has launched a series of studies, actions and projects which aim better to understand the knowledge economy and the importance of intangibles as competitiveness factors (E.U Commission 2000).

The aim and the motivation of the WPIV approach is rather simple and straightforward: to come to an overview of the value of all types of assets that are to be created by the project in order to be able to exploit these assets, on two levels:

- For the entire consortium cumulatively;
- For each individual partner separately.

WPIV aspires to utilise an easy-for-use methodology that will help partners to express their assets, the ones that each one possess as well as the ones that are created during the project execution and which are collectively owned either by all or by more than one partners.

An important concern is notably to ensure that the approach is useful for academic research partners, and in this context also appropriate to non profit-making entities. Another issue is to ensure its appropriateness for SMEs and large organisations at the same time.

Besides, in the following **Exploitation** is considered under two meanings:

- Commercial utilisation of research results:
  - Doing business: contract, licensing;
  - Spin-off creation;
- Non-commercial utilisation of research results:
  - Patents
  - Dissemination through publications and lectures;
  - Starting or extending ((inter)national) research group/institute.



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The first aspect will more concern private research actors such as industrials.

The second aspect will more concern the public research organisation partners (academic) such as universities. In some rare cases, it may be possible for a RTD project academic partner to launch a spin-off company to exploit project results.

The “**Exploitation plan**” is therefore the framework to stepwise determine, describe and plan the commercialisation of the different sets of research results/know-how.



### 3 Exploitation plan guidelines

In the following, some guidelines are proposed for the elaboration of the business plans per WP based on the framework proposed in the associated template.

| Chapter   | Title   | Aims  |
|---|---|---|
| <b>3</b>  | <b><i>General presentation of the product / service</i></b> |   |
| 3.1   | Description   | This chapter aims to identify and describe the asset (product, service...), per variant (if any). Various potentially exploitable results or exploitable result groups should be identified by partners. Each exploitable result is associated a reference number, is described and the partner(s) owning the results and to be mainly involved in their future use is identified. These elements are synthesized in the table in Annex A (to be completed by concerned WP partners). |
| 3.2   | The development story                                       | This aims to present the technical development story of the asset (product, service...), the existing technical realisation, and any dissemination activity which has been undertaken.  |
| 3.3   | Application example   | This aims to describe the use case studied in the breast of the EFFORTS project and any other case study (in other ports...); information obtained during the associated demonstration will be integrated.  |
| 3.4   | Technology  | This details the technologies used by the product and aims to assess whether or not the concept is a technological breakthrough.  |
| 3.5   | Status  | This concerns the status of the patent activity (existing before, patents search in course, patents obtained during the project), progress of development, marketing and/or industrialisation.  |
| <b>4</b>  | <b><i>General presentation of the product / service</i></b> |   |
| <i>The business plan is based on a number of fact findings, studies and analysis of the actual situation. These include market analysis and user requirement investigations as well as assessment of the state of the art of the field.</i> |   |   |
| <b>4.1</b>  | <b>Environment</b>  |   |



|            |  |  |
|------------|--|--|
| 4.1.1      | General context                        | This aims to describe in brief the general context in which the asset is planned to be exploited. It addresses issues such as demography, world trades, political trends, lobbies.   |
| 4.1.2      | Figures                                | This chapter aims to present important figures related to the general context.   |
| 4.1.3      | State of the art                       | This chapter gives an overview of the state of the art in the field (in terms of product on the market, perspectives in terms of technological evolutions, most recent developments, other comparable RTD projects, comparison, compatibility with existing techniques) and aims to conclude on the effective innovation-related feature of the asset (product, service...).   |
| 4.1.4.     | Legislation                            | EFFORTS products will have to cope with different legislation issues, and norms and standards. These chapters aim to describe the legislation and the norms and standards in the concerned field. It also aims to describe potential promotion activities realised in terms of legislation and/or of normative and standardisation activities. Through their current activities, industrial and research partners (may) have some links with legislation / standardization bodies and may make these links active if necessary, notably in case of promotion of legislative evolutions and new standards or norms or recommendations for evolutions. |
| 4.1.5      | Norms and standards                    |  |
| <b>4.2</b> | <b>Demand</b>                          |  |
| 4.2.1      | Market characterisation                | This aims to characterise the market for the concerned product (access, targets, use case, users' requirements, trends). It also aims to define criteria of market segmentation to allow detailed analysis. At last, it aims to determine if this is a potential, emerging, growing, mature or declining market.   |
| 4.2.2      | Figures                                | This aims to provide figures on the potential market, the market share, and evolution trends.  |
| 4.2.3      | Market focus                           | This focuses on specific market segments (most promising): local markets, the biggest potential ports / clients...   |
| 4.2.4      | Results from workshops and conferences | The feedback from workshops and conferences is expressed, notably detailing the viewpoint of   |



|  |   |   |
|--|---|---|
|  |   | different potential clients.  |
| 4.2.5  | Results from on the field demonstration       | The conclusions from the demonstration are expressed, notably detailing the viewpoint of different potential clients.   |
| <b>4.3</b>   | <b>Competitors</b>                            |   |
| <p><i>Competition today has shifted from inter-firm competition to inter-chain competition and the scope for innovation, operations and market supply is global. Market access is crucial - it is the right of entry to play in the game. Considering this issue, the study of competitors is of main interest for the business plan analyses.</i></p> |   |   |
| 4.3.1  | Market penetration                            | This intends to provide the characteristics of existing competitors (e.g. market size, shares, trends...) and any available information on potential newcomers.   |
| 4.3.2  | Products comparative analysis                 | This aims to assess the EFFORTS product / service positioning in relation to competitors in terms of quality, price, image, customer service... Costs and differentiation issues are addressed...   |
| 4.3.3  | Commercial strategies                         | This aims to study the commercial strategies of the competitors.  |
| <b>4.4</b>   | <b>Development opportunities</b>              |   |
| <p>This intends to define the opportunities for the development for the product / service. Does the product answer to needs uncovered until now, does it create a new usage? Is it actually one step beyond the actual state-of-the-art? Is it really differentiated regarding its competitors?</p>  |   |   |
| <b>5</b>   | <b>Development strategies and action plan</b> |   |
| <p><i>Each member of the EFFORTS consortium has a different strategy as to the future utilisation of the results obtained in the course of the project. In complement to individual strategies of exploitation, collaborative strategies may be identified. Each partners' point of view is exposed in the following.</i></p>                          |   |   |
| <b>5.1</b>   | <b>Collaborative approaches</b>               |   |
| 5.1.1  | Business model                                | This concerns the business model adopted for the collaborative approach.  |
| 5.1.2  | Product and production strategy               | This concerns the EFFORTS product and production strategy, including the operation and maintenance strategy. The market introduction of EFFORTS product/service n°XX is likely to have several key requirements on production processes. Critical points may include the installation requirements, the manufacturability |



|              |                                   |  |
|--------------|-----------------------------------|--|
|              |                                   | of the EFFORTS product, the software quality...  |
| 5.1.3        | Commercial strategy               | This concerns the commercial strategy, including the sales strategy (pricing).   |
| 5.1.4        | Ability to exploit                | This concerns the identification of each partner's core competencies with respect to the WPs – both those that are contributed by each partner to the WPs and which shall affect its final outcomes, and those that are affected by the WPs. For each of his core competency the partner is proposed to define which intangible assets are related with and fulfil table 2 presented in Annex B. |
| 5.1.5        | Schedule                          | This chapter concerns the main steps of the commercial development and associated objectives (turn over, resources...).  |
| 5.1.6        | Criteria and means to measure     | This concerns the criteria (such as patents, prototype demo, client command, beginning of industrial production) and means to measure the realisation of each milestone.   |
| 5.1.7        | Resources                         |  |
| 5.1.7.1      | Human resources                   | This concerns the HR aspects (functions and roles, responsibility, HR politics e.g. training).   |
| 5.1.7.2      | Technical resources               | This concerns the technical resources to be utilised (in terms of logistics, equipments...).   |
| 5.1.7.3      | Financial and juridical structure | This concerns the financial and juridical structure (type, capital distribution, expected trends...).  |
| <b>5.2</b>   | <b>Individual approaches</b>      |  |
| <b>5.2.1</b> | <b>Partner XX</b>                 |  |
| 5.2.1.1      | Business model                    | To be completed by partner XX following guidelines issued for the collaborative approach.  |
| 5.2.1.2      | Product and production strategy   |  |
| 5.2.1.3      | Commercial strategy               |  |
| 5.2.1.4      | Ability to exploit                |  |
| 5.2.1.5      | Schedule                          |  |
| 5.2.1.6      | Criteria and means to measure     |  |
| 5.2.1.7      | Resources                         |  |
| <b>5.2.2</b> | <b>Partner YY</b>                 |  |



|  |                                    |   |
|--|------------------------------------|---|
| 5.2.2.1  | Business model                     | To be completed by partner YY following guidelines issued for the collaborative approach. |
| 5.2.2.2  | Product and production strategy    |   |
| 5.2.2.3  | Commercial strategy                |   |
| 5.2.2.4  | Ability to exploit                 |   |
| 5.2.2.5  | Schedule                           |   |
| 5.2.2.6  | Criteria and means to measure      |   |
| 5.2.2.7  | Resources                          |   |
| <b>6</b>   | <b>Financial forecasts</b>         |   |
| This aims to detail the costs and revenues at short, medium and long terms (2009-2014) for the concerned EFFORTS product/service. Indicators to judge of the business-related features of the product have also to be determined.  |                                    |   |
| <b>7</b>   | <b>Opportunities and threats</b>   |   |
| <b>7.1</b>   | <b>SWOT analysis</b>               |   |
| <p>An important input of a business plan concerns the recognition and examination of Strengths, Weaknesses, Opportunities and Threats (SWOT), a rather all-time classic technique that aims to help at the early stages of pre-processing input to achieve the formation and classification of the set of particular project developments and results which the project will deliver. SWOT may be performed for the project as a whole. This includes the project approach, methodology, and partners' assets. In this respect Strengths should include an internal list (internal: to the consortium and each partner separately, and regarding the project itself) of all the "strong" points of the subject under study (in the present case this can be either the overall project outcome or the particular developments which will be led by the partner under consideration), while Weaknesses include an internal list of all the possible "weak" points. Respectively Opportunities hold an external list (external: to the consortium and each partner separately, and regarding the project itself) of the opportunities that might exist regarding the exploitation of the project outcomes, while the threats category includes the external threats that might be faced while trying to exploit the project outcomes.</p> <p>Performing the SWOT, the partners can obtain for the first time a common view of the project's whereabouts as if this was a ready to market product. Another benefit and also crucial is that this information will form the basis of the exploitation strategies in the latter stages of the analysis. For each one of the project's assets, the partners can look at the SWOT table to try to identify elementary strategies (through the SWOT combinations: SO, WO, WT, ST) by exploiting the asset under examination.</p> |                                    |   |
| <b>7.2</b>   | <b>Means to mitigate the risks</b> |   |
| A mitigation process is proposed to manage identified risks in the best pro-active way.  |                                    |   |



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|  |                   |
|--|-------------------|
| <b>8</b>   | <b>Conclusion</b> |
| This last chapter aims to give a conclusion to the document. |                   |



## ANNEX A: EFFORTS PROJECT ASSETS LIST

| N°  | Description of the result   | Partner(s) concerned |
|-----|---|----------------------|
| 1   | Innovative product 1  |                      |
| 1.1 | Variant a   |                      |
| 1.2 | Variant b   |                      |
| 2   | Innovative product 2  |                      |
| 2.1 | Variant a   |                      |
| 2.2 | Variant b   |                      |
| 3   | Research publications, and the edition and marketing of state of the art  |                      |
| 4   | Methodologies know-how  |                      |
| 4.1 | Methodologies know-how topic n°1  |                      |
| 4.2 | Methodologies know-how topic n°2  |                      |
| 5   | Technological know-how  |                      |
| 6.1 | Technological know-how topic n°1  |                      |
| 6.2 | Technological know-how topic n°2  |                      |
| 7   | Market know-how   |                      |
| 8   | Communication know-how  |                      |
| 9   | New services – the know-how achieved from EFFORTS may be used for:  |                      |
| 9.1 | New maintenance activities: the EFFORTS product n°XX will imply new maintenance activities and new services to be provided  |                      |
| 9.2 | New training activities: new training courses will be developed and new sessions organised  |                      |
| 9.3 | Consulting services: <ul style="list-style-type: none"><li>• Accompaniment of ports/terminal actors for the restructuring of their production facilities and work flows based on the implementation of the EFFORTS product n°XX.</li><li>• Advise of port/terminal actors of new innovative devices</li></ul> |                      |

**Table 1: EFFORTS project assets list**



## **ANNEX B: CORE COMPETENCIES AND ASSETS**

| <b>Core competencies</b>  | <b>Related intangible assets</b>  |
|---------------------------|---|
| Extensive Domain Know-How | Keep up-to-date in concerned technology advances, new solutions and architectures |
| Expertise                 | Corporate know how in core business domain  |

**Table 2: EFFORTS partners core competencies and assets**