

Collaboration to Clarify the Cost of Curation



MS7—Functioning Information Dependency Profile

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UK Data Archive (University of Essex)	UESSEX	UK
Keep Solutions LDA	KEEPS	PT
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External Links

Note: Many of these documents are dynamic and will be changing throughout the lifetime of the project. Where possible a link has been provided to a snapshot of the document referred to at the time of publication along with a link to current version.

Link	URL	
Project Website	Current	http://4cproject.eu/
Project glossary	Snapshot	http://4cproject.net/?attachment_id=302
	Current*	https://docs.google.com/spreadsheet/ccc?key=0Au2-xr2TAgEKdEJZN2tRZmRzcEplclBtNkMtZ3g1aE
Thoughts on task shifting and oversight	Snapshot	http://4cproject.net/?attachment_id=314
	Current*	https://docs.google.com/document/d/1DjcpQ78W1T1TuW-dERu9sUsARIk8c_rlfVTJcwuZ5S4
Appendices	As published	http://4cproject.net/?attachment_id=331

*Accessible only to collaborators

Executive Summary

This milestone report (MS7) relating to a Functioning Information Dependency Profile (FIDP) provides an overview and status of the work being conducted by Task T3.1—*Coordinate, design and monitor the information dependencies within the project* (T3.1).

The function of Task T3.1 is to support the progression of the project and facilitate the work of the other project Tasks¹ as well as the communication between them. This report details how the work of T3.1 is planned and executed. It describes the mechanisms and products that enable T3.1 to fulfil its mission and how the 3.1 methodology is applied continuously throughout the duration of the project.

The identified tasks for T3.1 are:

1. Establish a common understanding of the project
2. Identify and map the dependencies between Tasks
3. Enable the information flow between Tasks
4. Ensure continuous application of the T3.1's methodology throughout the lifetime of the 4C project

And the products to support the execution of the tasks are:

1. An excel sheet, the "Dependency Registry", that maps all dependencies within the project
2. A visualization of the dependencies of the project in a PERT chart
3. The on-going creation of templates for other Tasks
4. A glossary to support the use of a common terminology within the 4C project
5. A procedure that ensures that T3.1 does its job throughout the project

The products have reached the appropriate level of maturity for this stage of the project and have proven to be efficient so far:

- The Dependency Registry is used by the Task leaders, by the Project Coordinator (Jisc) and by T3.1. It has already been used to identify needs for templates and solve timing and resource issues.
- The visualization of the dependencies (PERT chart) is a product that has been completed most recently, but is now in use and will serve the project throughout its lifetime.
- The glossary is work in progress and will be during the project lifetime. The core, however, has been created, and will serve as a crucial project locus.
- The creation of templates is an on-going job that has already been productive and that will continue.
- The principles, the established mechanisms and the planning of T3.1's work described in the procedure ensure that this task does its job.

References to the products are to be found in the corresponding sections.

¹ Whenever a reference is made to a formal project Task, then this is capitalized: Task.

1 Introduction

Task 3.1—*Coordinate, design and monitor the information dependencies within the project* is being carried out by

- DET KONGELIGE BIBLIOTEK, NATIONALBIBLIOTEK OG KØBENHAVNS UNIVERSITETSBIBLIOTEK (KBDK),
- UK Data Archive (UESSEX),
- KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN – KNAW (KNAW-DANS) and
- STATENS ARKIVER (DNA)

The formal part of this Task is an early project milestone, namely Milestone 7, *MS7—Functioning Information Dependency Profile (FIDP)*.

The functional part of the Task is described in this report on milestone 7 and corresponds to the products and tasks that have been deemed necessary to establish in order to create the FIDP.

T3.1 does not distinguish between the Task and the FIDP, which, in essence, is the entirety of the products and tasks of T3.1.

T3.1 runs from month 1 to month 22 (M1-M22²) and is an auxiliary Task for the other Tasks of the 4C project: It produces deliverables that facilitate the work of the other tasks, it creates an overview of the dependencies that exist between the Tasks, and it communicates these dependencies and makes sure that the timing between and within the Tasks is observed.

Besides its mission to be an auxiliary Task for the other Tasks, the scope of T3.1 is to support the Project Management (WP1). But while WP1 is responsible for the overall project management of the 4C project, T3.1 functions on a more applied level. T3.1 holds both overview and in-depth knowledge of the information flow within the project. Combined with a continuous day-to-day contact with Task leaders, T3.1 facilitates work and has a more practical take on Project Management at content-oriented and detailed level.

This report outlines how the work of T3.1 is planned and executed. It describes the mechanisms and products that enable T3.1 to accomplish its tasks and to ensure that they are performed continuously throughout the duration of the project.

The first section provides a brief introduction to the purpose and function of T3.1 and describes the scope of this milestone. The second section describes the identified subtasks and how they are approached. This includes a detailed description of the products developed to support and ensure continuously execution of the tasks. At conclusion the report provides a few closing remarks including thoughts on how T3.1 can ensure that its tasks at all times are solved in the best possible way.

² February 2012-November 2014

2 Functioning Information Dependency Profile – Milestone 7

In order to make a Functioning Information Dependency Profile, T3.1 has interpreted the structure hierarchy of the 4C project as follows:



Figure 1—Breakdown of the structure of the 4C project

Work Packages and Tasks constitute the formal structure of the project, while Subtasks and Information Objects have been conceived by T3.1 to create an appropriate breakdown level that serves as an overview over processes and dependencies and helps control them. The Subtask level has been used as a basis for the PERT chart³ and the Information Object level has been used to fashion the Dependency Registry⁴.

The objective of the Functioning Information Dependency Profile was laid out in the Description of Work (DoW), and is to “Coordinate, design and monitor the information dependencies within the project”⁵. The description in the DoW reads:

The Assessment group will be responsible for producing the applied deliverables that emerge from component tasks in other work packages, and as such it is critical that the flow of information between groups, e.g. from the focus groups to the needs and gap analysis report (D3.1); or from the interviews to the CCEx Submission template (MS17), occurs using mutually beneficial formats. This coordination exercise will require frequent liaison and an in-depth knowledge of the intellectual dependencies between the work packages, principally as they pertain to the effective production of WP3 deliverables. To maximise the impact of WP4 activities, WP3 will design and scope some of the more detailed aspects of the Enhancement work and act in the role of a ‘client’ drawing on the specific expertise of others. This information dependency profile will be a detailed elaboration of the Project Structure and PERT diagrams (see section B 1.3.1 figures 2 and 3) and at a much more applied level (e.g. data schema) than would be possible or advisable as part of WP1 (Project Management).

T3.1 interpreted this text in a detailed Task description where its objectives and deliverables were elaborated into further detail:

This Task (T3.1—Information Dependency Profile) ensures that there is a common understanding of all aspects and concepts of the project and that the information flows seamlessly between the Tasks. It identifies dependencies, timing, inputs and

³ Cf. Annex 2: Snapshot of the PERT chart.

⁴ Cf. Annex 1: Snapshot of the Dependency Registry.

⁵ Cf. Annex 5: The full description of T3.1 from the DoW..

outputs between all Tasks, and visualizes them to the extent possible. This way it makes sure that the [...] deliverables of the project are in sync with each other.

This is done by continuously receiving detailed information about the needs of each Task in the project from the Task leaders.⁶

The subtasks that were subsequently defined established the envisioned objectives and the ensuing products of T3.1:

1. T3.1.1—Establish a common understanding of the project
 - a. By asking all Task leaders to describe their Tasks in detail and share this description⁷.
 - b. By facilitating communication between Tasks and act as facilitator.
2. T3.1.2—Identify and map the dependencies between Tasks
 - a. By analysing the above-mentioned Task descriptions.
 - b. By creating a mechanism that enforces regular, on demand and *ad hoc* communication between the Tasks, namely an Excel sheet that lists all the information dependencies of the whole project: The Dependency Registry.
 - c. By making a visualization of the dependencies of the project in a PERT chart.
3. T3.1.3—Enable the information flow between Tasks
 - a. By securing correct timing between tasks.
 - b. By creating templates for other tasks and information exchange between tasks.
 - c. Be creating a common glossary/terminology for the project.
4. T3.1.4—Ensure continuously application of T3.1’s tasks throughout the lifetime of the 4C project
 - a. By creating a procedure to secure a timely and adapted information flow between the tasks of the 4C project.

Beyond the delivery of T3.1’s early milestone (MS7), the challenge is on-going: T3.1 has to remain available for the other project Tasks at all times and ensure that the monitoring of and the communication between the Tasks is effective and useful.

Consequently the Tasks of T3.1 are iterative and the products will be adjusted as the projects proceeds. This report describes the status of T3.1’s work at the point of month 5 (June 2013) and the products are described as they look and function at this stage.

2.1 T3.1.1—Establish a common understanding of the project

The first challenge of T3.1 was to establish a common understanding of the project, align expectations and anticipate any issues pertaining to the intellectual content of the project.

In order to do so, the members of T3.1 needed firstly to ensure that they had acquired a full understanding of the project themselves; then it was important to make the Task leaders fully understand the project and distribute this understanding to the Task members.

Below is summarized how this has been done:

1. The composition of T3.1: T3.1 is composed by members of the project who contributed in the writing of the project proposal for the European Commission.
2. The inherent mechanisms in the project structure:

⁶ Extract from the Task description of T3.1. Cf. Annex 6: Task leaders’ Task descriptions as of June 20th 2013.

⁷ Cf. Annex 6: Task leaders’ Task descriptions as of June 20th 2013.

- a. The leader of T3.1 is also the leader of Work Package 3, which, because of the nature of its Tasks, is the Work Package that digests all the knowledge and information of the rest of the project.
 - b. The leader of T3.1 is in the capacity of Work Package leader also a member of the Management Coordination Group (MCG)⁸, the Project Board (PB)⁹ and the Advisory Board (AB)¹⁰.
3. The instigation of detailed Task descriptions received and processed by T3.1 in the very beginning of the project.

These mechanisms have enabled an insight into the intellectual content of the project and provided a view on Task specific challenges at the project overview level and at a detailed technical level.

The detailed Task descriptions are accessible online for all project members, and in the making of the FIDP, cross-dependencies have been communicated to the relevant project members, which has led to in-depth discussions that contributed to the common understanding of the project.

Finally, the creation of a common glossary and the discussions to agree standard terms have also facilitated the common understanding of the project, see section 2.3.3, Create a dynamic glossary on page 13.

2.2 T3.1.2—Identify and map the dependencies between Tasks

In order to create a usable way to administer all the project's information dependencies, it was quickly established that a visual overview in the form of a diagram (i.e. a PERT chart) would be unwieldy and not particularly useful when it came to handling the many hundreds of ever-changing dependencies that constitute the necessary information flow of the project.

Instead, it was decided that each Task leader described his or her Task thoroughly, using the Description of Work as a basis in order not to stray from this formal obligation of the 4C project. To this end, a template was distributed to each Task leader. The descriptions consist of 4 mandatory sections: A general description of the Task, the specific definition of subtasks and their internal and external dependencies, a simplified Gantt-chart to illustrate the dependencies and the timing of the Task, and lastly a section describing risks.

2.2.1 The Dependency Registry

Each Task description has been analysed and the dependencies incorporated as Information Objects (IO) in an Excel sheet, the Dependency Registry. The Excel sheet consists of 5 columns that each describes a necessary element for the identification and the usability of the IO: Delivery date, consumer, ID, creator and the source of the IO.

⁸ Description of Work, B1.3 Quality and effectiveness of the coordination mechanisms and associated work plan, p. 11 and B 2.1 Management structure and procedures, pp. 15-18.

⁹ Description of Work, B 2.1 Management structure and procedures, p. 17.

¹⁰ Description of Work, B 2.1 Management structure and procedures, pp. 17-19.

For example:

In (Delivery Date)	I (Consumer)	Need this (Information Object)	From you (Creator)	Source (Task description – word file)
M06 – July 13	T2.2.3 - Joy Davidson - Joy.Davidson@glasgow.ac.uk	IO2.3.2.2 - Extensible framework interview template	T2.3.1 - Sabine Schrimpf - S.Schrimpf@dnb.de	T2.2.-information-dependencies_T3.1

Table 1—Example from the Dependency Registry

1. The **1st** column, “**In (Delivery Date)**”, indicates the due date of the IO. This is the deadline that cannot be exceeded without prior agreement from the parties involved (column 2 and 4), and, when necessary, the Work Package leader and/or the Project Coordinators (JISC).
2. The **2nd** column, “**I (Consumer)**”, indicates which Task is expecting the deliverable.
3. The **3rd** column, “**Need this (Information Object)**”, displays the deliverable. The ID is either inherited from the DoW (i.e. D4.4) or an ID attributed by T3.1. In the latter case, it is built like this: “IO2.3.2.2”, where:
 - a. “IO” equals “Information Object”
 - b. the first two digits, “2.3”, indicate the official DoW Task number;
 - c. the two last digits, “1.2”, indicate the subtask number which is taken from the Task leaders’ Task descriptions.

These ID’s are traceable and can always be found in the corresponding Task descriptions in case more contextual information is needed. Note that the same deliverable can be displayed several times—when it has more than one consumer or creator.

4. The **4th** column, “**From you (Creator)**”, shows which Task is the creator of the deliverable.
5. The **5th** column, “**Source (Task description—word file)**”, points to the document in which the deliverable has been identified. The exact name of the word file (extension excepted) in which the Task description is to be found is reproduced here and the filename always starts with the corresponding Task number and ends with “T3.1” to indicate that the description has been processed by T3.1. For example: T2.2.-information-dependencies_T3.1(.doc).

The principle of this pragmatic approach is that each Information Object has a client that needs it at some juncture in order for his/her Task to progress. Consequently, a need is created and the monitoring task of T3.1 is effectively being crowd-sourced to the whole project, although T3.1 also takes on this responsibility.

2.2.2 The PERT chart

The objective of the PERT chart as described in the DoW is to create:

[...] a detailed elaboration of the Project Structure and PERT diagrams (see section B 1.3.1 figures 2 and 3) and at a much more applied level (e.g. data schema) than would be possible or advisable as part of WP1 (Project Management).

The PERT chart today is a supplement both to the Dependency Registry and to the Gantt chart made by the Project Management (Jisc).

The PERT chart does not visualize the almost 400 dependencies between the Information Objects, as this would create more confusion than overview, but their approximately 50 hierarchical parents, the subtasks.

A snapshot of the PERT chart is to be found in Annex 2.

2.3 T3.1.3—Enable information flow between Tasks

The Dependency Registry and the PERT chart map the dependencies between Tasks and provide an overview of what information is needed by whom and when. This is basis for enabling the project's continuous information flow.

In order to ensure the information flow in practice, T3.1 has created means and methods to facilitate the flow. These are based on three components: Correct timing between Tasks, templates for information exchange and a common terminology within the 4C project. The three components are described individually below.

2.3.1 Secure the correct timing between Tasks

The first step in ensuring efficient information flow is to secure correct timing. Within the project there are a high number of dependencies between Tasks. It is crucial that timings are correct in order to prevent bottlenecks and inefficient use of resources and hence to ensure that the work is kept within the timeframe and proceeds as planned.

The Dependency Registry shows when the information has to be exchanged and between which Tasks. Based on this information, T3.1 proactively works to ensure that agreed deadlines are met and that needed information is delivered on time. In everyday practice this is done by continually reminding Task leaders about deliverables and setting up meetings between the concerned parties whenever a problem is encountered.

A more elaborate description of how this is done is given in section 2.4 that describes the procedure used to guarantee the persistent application of T3.1's tasks.

2.3.2 Create templates for other tasks

Enabling information flow between Tasks is not solely done by ensuring correct timing. Form and content is equally important as this ensures that the information is usable and understandable across the Tasks.

To meet this need, T3.1 provides templates for information exchange between Tasks. The templates are made by request from the Task leaders or are proactively suggested by T3.1.

One example of use of these templates is in the case of Task descriptions¹¹ where T3.1 provided a template for describing Tasks.

Another example of how T3.1 will facilitate work and information flow by providing templates is regarding the collection of cost data. The 4C project is collecting cost data from external and internal partners. This data is expected to be very diverse and likely to be different for each institution delivering data. It may differ widely in e.g. format, structure, level of detail, coverage. To ensure usability of the collected

¹¹ See section 2.2 T3.1.2—Identify and map the dependencies between Tasks on page 12.

information T3.1 will help producing a template to receive data and a format that can be used to feed this data into the Costs Curation Exchange (see deliverable D2.8¹²).

2.3.3 Create a dynamic glossary

Another important element in enabling information flow is use of consistent terminology. This is essential for internal communication and helps ensuring that exchanged information is usable and understandable across the Tasks. Furthermore establishing a common terminology within the project is useful for external purposes as 4C communicates with a wide range of stakeholders. The terminology will ensure consistency in the external communication and help making the specialized field of costs of curation more understandable to external stakeholders with limited insight to the area.

Establishing a common understanding of the terminology is especially important as the field of digital curation holds many slightly divergent terminologies. Moreover, the understanding of each term may differ from country to country and even from institution to institution.

To meet the need of a common terminology within the 4C project, T3.1 has created a project glossary¹³. It builds on the existing terminologies, but instead of uncritically adopting a single terminology, it collects the relevant terms and selects the definitions that most precisely describe each term.

The glossary is dynamic and will be expanded as the project proceeds and as the need for agreement on new terms emerges. It is located on Google Drive and can be accessed and edited by all participants of the 4C project, and is administered by a member of T3.1, namely KBDK (Det Kongelige Bibliotek).

The glossary consists of 4 columns: Term, Definition, Author and Comments. For example:

Term	Definition (Definition in the context of 4C)	Author (Who added the term)	Comments (comments especially as regards source of the term and/or definition)
Cost model	A representation of the activity of digital preservation that can be shared examined and critiqued and whose purpose is to shed light on the costs entailed in the activity of digital preservation.	Ulla Bøggvad Kejser	APARSEN-REP_D32_1-01-1_0, p. 11

Table 2—Example from the 4C project glossary

It is initially filled in by Task leaders, who extract essential terms from their Task description and fill these into the glossary along with a suggested definition. This is done to make sure that all central terms are included. Furthermore the glossary will be filled as project participants come across terms that need to be agreed upon within the project.

On a regular basis the glossary is revised, discussed and agreed upon. This is done in plenum where the suggested terms and definitions are discussed until agreement on one definition is achieved. These terms are subsequently established as official 4C terms and used as such. This means that the dynamic nature of the glossary only applies to the new terms being added to the glossary.

The first version of the glossary will be discussed at the 4C project Meeting in Frankfurt on July 2-3 2013.

¹² Deliverable 2.8 is described on page 10 in the DoW.

¹³ See Annex 4: Snapshot of the 4C Project Glossary and http://4cproject.net/?attachment_id=302

2.4 T3.1.4—Ensure continuous application of T3.1’s tasks throughout the 4C project

The following procedure has been designed to guarantee that T3.1 fulfils its mission to interconnect the Tasks of the 4C project and make all project participants aware of the information dependencies that bind the project together.

The guiding principle of this work is inspired from the T3.1 description in the DoW, where the

[...] coordination exercise will require frequent liaison and an in-depth knowledge of the intellectual dependencies between the work packages.¹⁴

The keywords in this phrase are “Frequent liaison” and “in-depth knowledge”.

2.4.1 Frequent Liaison

T3.1 uses three strategies to ensure that all information aspects of the project remain transparent. The frequent liaison is regular, on-demand and *ad hoc*. It is encapsulated in the Dependency Registry, which is sent to the project participants on a monthly basis with deadline reminders including any detected issues pertaining to the flow of information. The Dependency Registry is also available online and is thus accessible by all project members at all times.

1. **Cross-sectional view.** This is the regular liaison. The goal is to gather the entire information flow of the project in a spread sheet, which allows a complete overview of all the dependencies of the project. Each month, T3.1 will analyse the spread sheet and send a reminder to the project participants who need to produce or receive a deliverable that is due. The level of detail of the spread sheet is derived from the Task leaders’ own Task descriptions and the spread sheet holds presently around 350 Information Objects (inter-Task dependencies).
2. **Personal view.** This is the on-demand liaison. Whenever Task leaders or Task participants need a clarification about an information dependency, they can access the Dependency Registry online, and they can also contact a member of T3.1 who will help remedy the issue.
3. **Selective view and event view.** This is the *ad hoc* liaison, and consists of two parts.
 - a. **Selective view.** The goal is that T3.1 is available for and paying special attention to Task leaders’ needs that have a frequency above the aforementioned monthly periodicity or that have irregular frequencies. This ensures the possibility of meeting *ad hoc* needs.
 - b. **Event view.** The objective is to ensure that special events or periods with intense activity are accommodated. This is done by keeping the members of T3.1 informed about the events and activities of the project, which leads to the second guiding principle of T3.1: In-depth knowledge.

2.4.2 In-depth knowledge

The in-depth knowledge is assured by a thorough review of the Task descriptions and a detailed study of the Gantt-charts that have been created by the Task leaders and subsequently used by T3.1 to create the Dependency Registry. Whenever an issue is revealed in the Dependency Registry (timing issue, dependency issue, resource issue, etc.), T3.1 acts on it by communicating it to the owners (creator and consumer) of the Information Object that is the source of the issue and participates in solving it.

Two already mentioned inherent mechanisms in the project structure also contribute to this:

¹⁴ See Annex 5: The full description of T3.1 from the DoW.

1. The leader of T3.1 is also the leader of Work Package 3, which, because of the nature of its Tasks, is the Work Package that digests all the knowledge and information of the rest of the project.
2. The leader of T3.1 is in the capacity of Work Package leader also a member of the Management Coordination Group (MCG), the Project Board (PB) and the Advisory Board (AB).

These two principles—frequent liaison and in-depth knowledge—together with the underlying assumption of a Task like this—the need to be proactive—keep T3.1 at the forefront of the action throughout the lifetime of the project.

2.4.3 Mechanisms

Schematically, the interactions of T3.1 are shown in the following table:

Action	Description	Target	Frequency	Mechanism	Impact
Prompting of Task descriptions and Gantt charts	Each task leader sends a detailed Task description, including a Gantt-chart and a risk profile. This Task description is available online and updated whenever needed.	The 4C project	Beginning of the project and ad hoc reception of updated Task descriptions.	Distribution of templates and proactive retrieval of Task descriptions.	Task leaders obtain thorough knowledge of their own Task, distribute it to the Task participants and provide a first base line for their work, for the Dependency Registry, the PERT chart and for the Project Management.
Monthly deadline updates and monthly deadline reminders	Distribution of the deadlines at the start of each month. T3.1 sends individual reminders to Task leaders if a deadline has been transgressed.	The 4C project and individual Task leaders	Monthly	Distribution of the Dependency Registry and highlighting of the imminent deadlines. Proactively informing Task leaders whose tasks have exceeded their deadline.	Make progress (and lack thereof) transparent and gives all parties a possibility of handling breaches and resource and timing issues.
<i>Ad hoc</i> reviews	Based on a proactive approach to the project's activities, T3.1 will discover and handle any discrepancies.	Individual Task leaders	Ad hoc	Proactive intervention	Allows T3.1 to communicate any issues to the relevant party (Task leader or Project Management).
On-demand responses	Any member of the 4C project can consult the online Dependency Registry and contact a member of T3.1 to address an issue.	Any	Ad hoc	Reception of a request	The Task leaders (and Task participants) have access to and full control over the intellectual dependencies of the project.
Detecting issues	Issues detected by either T3.1 or any member of the 4C project are initially being handled by T3.1.	Any	Ad hoc	Proactive communication and solving or communication of any issues detected by T3.1.	All potential issues are being communicated or solved in due time.
Terminology	T3.1 is responsible for making the Task leaders make draft definitions of any relevant vocabulary in their Task descriptions.	Task leaders	Ad hoc with a first batch of tentative definitions sent before July 3 rd 2013.	Distribution of Task specific vocabulary that needs defining and hosting of a session at the 2 nd project meeting to sanction the definitions.	Creation of a base line terminology document.
Templates	T3.1 is responsible for making—or assisting in the making of—templates requested by other Tasks.	Any	Ad hoc	Proactive detection of needed templates and creation of templates.	Adapted information flow.
Escalation	T3.1 forecasts deviations and breaches of tolerance and escalate these to Project Management (WP1) when necessary.	Any	Ad hoc	Monitor and analyse progress of work and information flow in order to proactively forecast deviations and breaches of tolerance.	Timely handling of breaches at the right level of responsibility (Task level, Work Package level, Project Management level or European Commission level).

Table 3—Mechanisms of T3.1

These mechanisms will be applied by T3.1 during the whole project and in close dialogue with the task leaders and the Project Management.

2.4.4 Escalation

A mechanism that merits further elucidation is the escalation process that is triggered in case a tolerance is breached. The role of T3.1 is to report these matters to the 4C Project Management that decides whether the breach can be handled within the Task (Task leader), within the Work Package (Work Package Leader), and within the Project (Project Management) or needs to be escalated to the European Commission (EC Project Officer). The escalation process is described in a document provided by the 4C Project Management¹⁵.

¹⁵ http://4cproject.net/?attachment_id=314

3 Conclusion

This report provides a status and overview of the work being conducted by Task T3.1. It describes in detail the mechanisms and products that enable T3.1 to perform its tasks.

The work of T3.1 is not completed solely with the products and procedures described in this milestone report.

The challenge and tasks of T3.1 are on-going. This does not only mean that its tasks must be executed continuously, T3.1 must seek to ensure that these tasks at all times are solved at an appropriate level. To meet this challenge, T3.1 monitors the project and the needs for support in order to adjust the procedures and products on regular basis to ensure that the actual needs in the project always are met.

In this way T3.1 continuously ensures progression of project and facilitates work of the other work packages in the project throughout its duration and thus T3.1 fulfils the important auxiliary task that is necessary in order to the project to succeed on time.

Further detailed information can be found in the associated Annexes