

a Transdisciplinary approach to the
Emerging CHallenges of NOvel technologies:
Lifeworld and Imaginaries in Foresight and Ethics
(TECHNOLIFE)

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**TECHNOLIFE's deliverable D3.1:
Documentation of deliberative tool Ker-DST, initial version**

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PART 1 General description

The core concept KerDST

The objective of KerDST is the structuring of multi-stakeholder dialogue and deliberative approaches to complex assessment. Ker DST is an of interactive ICT “deliberation support tools”. Within technolife our focus is on the use of KerDST within the process of the collection of “stories” and in the process of structuring an “imaginary resources database” around these narratives.

We have proposed that narratives can in general be organised within a multi-stakeholder (read multi-imagined-communities, multi-criteria (read multi-issues) deliberation process, structured in terms of:

- A defined spectrum of issues to be addressed; and
- A synthetic representation of the full spectrum of the ‘imagined communities’ relevant to the assessment situation.

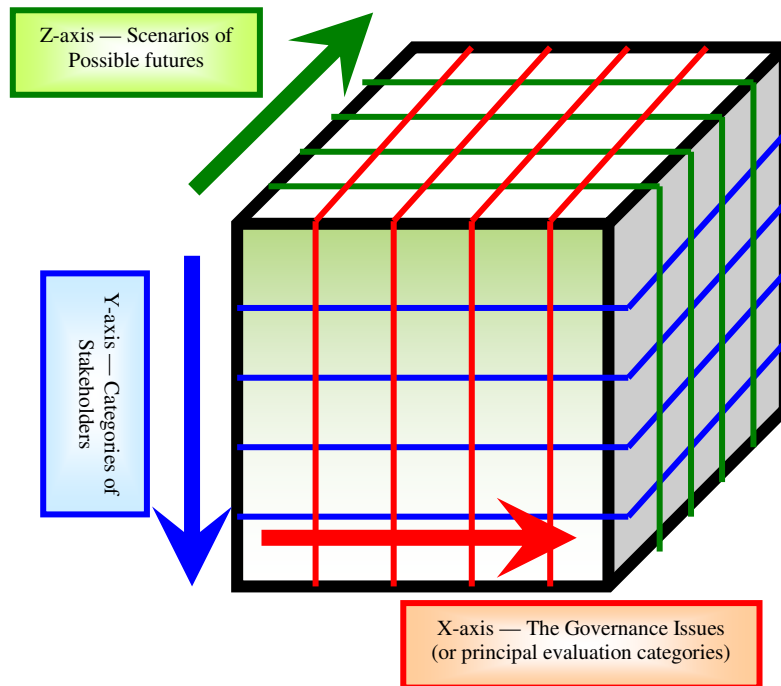
Starting with this basic structure as a function of the class of situation we introduce further comparative dimensions as a function of evaluation/classification needs. In TECHNOLIFE, in order to capture de foresight dimension we consider the process as an ex ante evaluation process:

- We will thus have to propose a number of alternative scenarios (that is, envisaging various ‘possible futures’).

The ‘crossing’ of these three dimensions leads to the three–dimensional structure of KerDST, the KerBabel™ Deliberation Matrix. Within Technolife the graphical representation of this structure will not be the participant’s entry point. The participants entry point will consist of a forum associated with a media space and the ability to vote.

The role of KerDST is to permit a transparent presentation of the process and outcomes of judgements offered by each category of imagined community, for each of the scenarios, across a spectrum of governance or performance issues.

In this process, the range of options (along the Z-axis), of governance issues (X-axis) and of stakeholder categories (Y-axis) must be established.



According to this schematic model, the evaluation activity proceeds through a step-by-step phase — which can be undertaken on an individual or a collective basis within a group — that consists of expressing one point of view (the forum aspect) and colouring the cells of the 3-D Deliberation Matrix (the vote dimension). Once the DM structure is in place, or even as it is being developed, the actors in the SA process focus on each cell of the DM, with the purpose that each stakeholder class should offer a judgement (key text plus a “vote” e.g., satisfactory, poor, intolerable, etc.) of each scenario in relation to each of the key governance or decision issues.

- One obtains in this way, for each imagined community, a rectangular array of cells, being a layer of the Matrix, within which the successive rows represent the evaluations (issue by issue) furnished by the selected class of stakeholders for successive scenarios, all this associated with a corpus of comments.
- And, looked at from another angle, one obtains, for each scenario, a rectangular array of cells, being a layer of the Matrix, within which the successive rows represent the evaluations (issue by issue) by each class of stakeholder, of a given scenario, each cell being associated with a corpus and a “vote”.
- And, in the third way of “cutting the cake”, one obtains for each issue, a rectangular array of cells, being a layer of the Matrix, within which the successive rows represent the evaluations (community by community) of each scenario, with reference to the selected issue, again associated with a corpus.

Within TECHNOLIFE each of the judgement (e.g., satisfactory, poor, intolerable, etc.) of each scenario in relation to each of the key issues will be associated with the narratives expressed to explain/frame/justify/illustrate/etc the judgement expressed. This will thus allow an initial structuring of the “imaginary resource database” as it will possible to associate with every narrative a 4 dimensional vector (imagined community, issue, scenario, and judgements). This vector will grow in the course of the work of WP4 through the inclusion of the various analytical results if WP4 (identification and description of social imaginaries relating to ethical issues, arguments, viewpoints and other expressions relating to ethical issues, possible identification of ethical issues not encompassed in results of WPs 1, etc).

General methodological pathway

How this plays out procedurally, will be achieved in four steps for each of the research lines individually (GIS, ICT and BODY):

1. *Preparation*

This preparation consists of (1) documenting the subject of the deliberation through the development of media spaces pertaining to the subject that will be deliberated upon (the research line) and pertaining to the issues and the scenarios; (2) identifying the members of the various stakeholder groups (communities) in operational fashion.

2. *Forum-1*

This is the main discussion forum for our participants and, in TECHNOLIFE, it is discursive only which means that it is a purpose-built online forum for textual contributions. We envision that we need input from a small team (of our Technolife partners) in keeping track of progressions, and to suggest interception with comments or questions for the convener to execute.

3. *Intermission*

At some stage the forum (*Forum-1*) is closed. Corpus analysts (WP4 partners within TECHNOLIFE) will receive an export of all discursive deliberations to-date, into a sequential tabular format with the necessary contextual encoding: (1) the place of each component (contribution) in relation to other components; (2) the place of each component in relation to the structure of the Forum itself. This output comprises the data corpus for a first round of analysis which will deliver *New issues* (term explained below) to be presented to *Forum-1* participants who are now called in (in relation to a big “thank you”) to pass direct judgements.

4. *Forum-2*

This is the second Forum, albeit not designed as a forum *per se* but set up to elicit direct evaluations on a set of *New issues* that have been extrapolated from the data corpus produced in *Forum-1*. These *New issues* will be situated within the *Scenarios* already present in the *Media space* and the direct evaluation will produce the KerDST cube, however, with the additional option for participants to write a comment or an explanation for their votes/evaluations. The comments will form an additional corpus of discursive data for analysts to take into account.

Before we walk through these four-step procedures in more detail, the remainder of this general section will explain what we mean by the key terms we are using as descriptors for appearances, conditions and functions.

Media space

By *Media space* we mean the actual environment of the Forum as it appears to the participant, ie. what specific 'objects' are available to view, read and interact with. In the following we explain three key 'objects' that provide the relevant information to participants and, thus, provide the necessary support structure to begin deliberation procedures. These are *Descriptive space*, *Scenarios* and *Issues*.

1. *Descriptive space*

This is the 'place of entry' after registering to participate. It holds information about the Debate (GIS, ICT or BODY in technolife), explains what the deliberation is about, in general terms, and it also presents an opening challenge such as a particular news blurb or an official statement of some sort addressing where the technology is going (or state-of-the-art), possibly accompanied with video or other media. For example, with reference to the BODY-line, the opening challenge could present the state of a single body, say a famous enhanced athlete, or some bodies or all bodies (potentially). The challenge operates like a probe.

2. *Scenarios*

How to determine *Scenarios* is not entirely resolved. There are two conceptions to consider. They are not necessarily contradictory, only differently conceived with distinct concrete consequences in terms of preparation efforts.

The first says that *Scenarios* should NOT refer directly to a specific technology but, rather, to generic conditions such as the future state of a town, a country, life-prospects, livelihood, etc. Such scenarios can be framed in terms of environmental, social, governance or economic conditions. For this choice, accessing standardised scenarios from foresighting groups in business or environmental-related research. Doing so, also provides the option of using a set of

future scenarios (extreme formulations) that can serve all three research lines. The other one says that the consortium should resource (or cherry-pick) *Scenarios* that are already in the public domain or popular imagination. For example there could be a description of one or more future scenarios found in a review article about one of the SciFi novels or an article on some TV programme, a Film, an actual event, from a news report, and so on. What will happen then is that a *Scenario* may directly or indirectly make reference to a specific technology.

To emphasise, participants' effort will be to situate the opening challenge or probe within any one or more of the *Scenarios*. For both options listed in the previous paragraph, organizers (Technolife partners) do not actually need craft the *Scenarios* but may either be using standardised scenarios or literally borrowing public domain media objects that suggest a range of *Scenarios* as opposed to *Issues* (see next term). What is different in using public domain objects however, is that we will most likely end up with a different set of *Scenarios* for each of the research lines (if three or four *Scenarios* for each line then perhaps not such a big deal)..

3. *Issues*

Issues are broadly framed questions raised specifically by the technology that is being considered. For example, in relation to the TECHNOLIFE BODY-line an issue could be framed around the question of access to enhancement (or lack thereof). It is important to acknowledge that there is no such thing as a morally un- or non-loaded *Issue*. Simply to devise such a tool as the *Issue* is in the context of KerDST deliberations, is an ethically/morally loaded act. The focus here however, is to select a pre-set of broadly framed *Issues* which are not already loaded in the very sense that they do not immediately flag up something that is recognised by anyone as ethically contentious, nor are they introduced upfront as ethically or morally contentious. Again, an interesting way of developing a set of *Issues* is to draw on public-domain media objects about actual events, from news reporting, commentaries and analysis, and so on, relating specifically to the research-line technologies –something of interest, humour, dread, fascination, and so on. To emphasise, the overall aim here is to build a repository of discussions, bottom up, from the initial instigation which uses a pre-set of *Issues* in relation to an opening challenge (a probe) within a defined set of imaginary future *Scenarios*.

Intermission (and interception)

The *Intermission* is basically the time taken out by corpus analysts (WP4 in TECHNOLIFE) to make first step analysis of all accumulated contributions of participants to-date (that includes the ongoing interception on part of conveners).

Note that *Intermission* should not be confused with *interception* during *Forum-1*. Ongoing interception on part of conveners will probe for further explanations, ask direct questions, encourage those who stay quiet to express themselves more, redirect the attention to particular emerging issues/interests and so on. This process will require a small group of partners to stay involved to keep track of exchanges and suggest interception as we move along. *Intermission*, on the other hand, will make use of accumulated contributions. It involves bottom up discursive and thematic analysis which will also extrapolate a set of *New Issues* to be posed for direct evaluation or voting—something that takes participants only a brief involvement because they are already well oriented after participating in *Forum-1*.

New Issues

The intention here is to extrapolate a set of unanswered or unaddressed questions. Such a set shall be framed in a way that allows for direct evaluation or vote, thus to make use of KerDST to proxy evaluative information. For example, say that some participants in *Forum-1* on the BODY have demonstrated openness and enthusiasm for enhanced humans. In that case, we might find ourselves inclined to present a set of *New issues* in the BODY-line, one of which asks participants to directly vote on free and unrestricted access to any body enhancement on offer. Another example might be if *Forum-1* on GIS has demonstrated that the interest in the technology as well as opinions about particular implementations diverge considerably. In such a case, questions can be posed about further deliberations, for instance, if participants can rank a set of proposed consultations in terms of their importance—listing options like access vs barriers to the technology, the tension between civil and military use, and so on. Since we do not know at this point how the interactions in *Forum-1* will develop, it is impossible to foresee how this plays out. Overall, we feel strongly about committing to this second round of direct evaluations and voting. But, how to make the best use of the KerDST voting protocol depends on how the interactions play out, what our analytic assumptions are and what the first round of analysis brings to fore.

Within the context of TECHNOLIFE, the general description here above can be summarized in the following figure:

Formalized pathway

Steps >	Preparation (ALL TECHNOLIFE PARTNERS AND WP INPUT NEEDED)	F 1 : the discursive forum (WP3/UVSQ LED, Important input from WP4/Lancaster and WP1/2 partners)	Intermission (WP4/ Lancaster)	F2: the evaluation forum (WP3/UVSQ LED, Important input from WP4/Lancaster and WP1/2 partners)
Inputs	-Scoping papers identifying clearly the research line in terms of issues and communities. -Papers focusing on operational considerations	Media space consisting of the descriptive space, the scenarios texts, the issue texts. Committed participants	-All textual deliberations in a tabular format.	-Media space consisting of a (n optionally recreated) media space, original scenarios, and new issues. -Recalled participants
Tasks	-Design and produce the descriptive space (initial entry point for the participants). -ID and clarify issues and scenarios, ID operationally participants and invite them. -Design and produce the "issue texts" and the "scenario texts"	-Running a deliberation with participants contributions consisting of comments, narratives and hyperlinks all with internal correspondences -Keeping track of progresses with internal correspondences -Intervention when deemed appropriate/ necessary..	-First round of analysis (bottom up discursive thematic analysis)	-Evaluation by participants through vote and "value indicator" weighting -Keeping track of progresses -Intervention when deemed appropriate/ necessary..
Outputs	-Media space consisting of the descriptive space, the scenarios texts, the issue texts. -Committed participants	-All textual deliberations exportable in a tabular format.	-New issues emerging from the participants contributions	-All textual deliberations exportable in a tabular format. With associated "vote" and "value indicator" weighting. -KerDST's Cube with a cube based access to the corpus.

PART 2 : Formalizing the pathway

Forum-1

Procedural considerations

What do deliberations operators (DO) do?

1. creates a debate labeled by the name of a research line
2. installs the Media-object and it's sub-objects – web context outside strct Ker DST requirement
3. invites people (by email) and commits them to the Forum
4. keeps track of progressions
5. intervenes if necessary
6. exports data

The “cognitive structure” (CS) of participation:

Register	>>	Enter descriptive space >>	Go-to-Forum	>>	Future-Scenario-1
					Issue-1
					Issue-2
					Issue-3
					Future-Scenario-2
					Issue-1
					Issue-2
					Issue-3
					Future-Scenario-3
					Issue-1
					Issue-2
					Issue-3

Effectively, what happens is that a *Descriptive space* (w/ all relevant information) is presented within an already designated debate, with already articulated future *Scenarios* and *Issues*. The role of the

convener is to keep track on what is going on and to intervene in case the interaction is trailing off or in case there are inappropriate activities (following standard measures on such occasions), and so on. But, what does participation exactly mean for the participant?

The way in which this happens (procedurally) for the participant is first by an invitation to participate, then to register and enter a descriptive space with some inviting probe. Responding to that probe (yes-take-me-there) takes the participant to the area which in the interface (and to the participant) is the very forum where considerations of *Scenarios* and *Issues* take place. Considerations or deliberations are actuated by the participants. They can respond (contribute) in writing with their comments, narratives, links to external websites and, importantly, respond to one another.

NOTE! We have taken out the option for participants to upload data objects such as pictures, sounds, etc. It can be way too cumbersome insofar as controlling or moderating adequately what sort of materials can and cannot be uploaded, for example, what is not relevant at all or, say, how large can they be and what are the limits then in terms of actual file sizes. Instead we leave the option open to contribute a link to external sources where images, sounds, and other media objects already reside.

Interface considerations

Immediate access to tools and other relative resources is crucial. For that purpose, the interface will be twofold on the screen display using a left-to-right split window. One window needs to provide overviews which basically speaks loudly that here is the descriptive information about this Forum and here is the overview information about *Scenarios* and *Issues*.

One consideration is to create hyperlinking from within the overview of *Scenarios* and *Issues* (left hand in the example below) to actual contributions (comments / deliberations, on the right hand below). The right hand window then needs to provide a 'narrow' or immediate access to the tree or threads of contributions, organised by *Scenarios*, *Issues* and *threading*. The \sim ^ symbols are used here to signify *read-more* and *back-to-top* options which in all likelihood will be necessary controls for participants to have.

FORUM (GIS, ICT or BODY)	
Descriptive space	Deliberations
Media-object Information Probe	Scenario-1—Issue-1
	<i>Scenario-x-Issue-y-thread (contributor)</i>
	<i>Scenario-x-Issue-y-thread (contributor)</i> ~ ^
Scenario-Issues-overview-1	<i>Scenario-x-Issue-y-thread (contributor)</i>
	<i>Scenario-x-Issue-y-thread (contributor)</i> ~ ^
	<i>Scenario-x-Issue-y-thread (contributor)</i>
	<i>Scenario-x-Issue-y-thread (contributor)</i> ~ ^
Scenario-Issues-overview-2	Scenario-1—Issue-3
	<i>Scenario-x-Issue-y-thread (contributor)</i>
Scenario-Issues-overview-3	<i>Scenario-x-Issue-y-thread (contributor)</i> ~ ^
	<i>Scenario-x-Issue-y-thread (contributor)</i>
	<i>Scenario-x-Issue-y-thread (contributor)</i> ~ ^

The second consideration has to do with access to overview information while participants are situating their own contributions, ie. picking up a thread or starting a new one in relation to a Scenario-x—Issue-y combination. On the left hand (below) remains the same general access. On the right hand, however, is a still narrower view with access to the immediate “parent” contributions (other contributions in the same *thread*) and relevant reference material, plus a text box to type.

FORUM (GIS, ICT or BODY)	
<p style="text-align: center;">Descriptive space</p> <p style="text-align: center;">Media-object Information Probe</p> <p style="text-align: center;">Scenario-Issues-overview-1</p> <p style="text-align: center;">Scenario-Issues-overview-2</p> <p style="text-align: center;">Scenario-Issues-overview-3</p>	<p style="text-align: center;">Deliberations</p> <p style="text-align: center;">Scenario-x-Issue-y-thread (<i>title</i>)</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p style="text-align: center;"><i>Descriptive material</i></p> <p style="text-align: right;">re: this tread (optional)</p> </div> <p style="text-align: center;">Scenario-x-Issue-y-thread (<i>contributor</i>)</p> <p style="text-align: center;">Scenario-x-Issue-y-thread (<i>contributor</i>)</p> <p style="text-align: center;"><i>blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah, blah</i></p> <p style="text-align: right;"><i>...read more ^</i></p> <p style="text-align: center;"><i>textbox (new contribution)</i></p> <div style="border: 1px solid black; height: 100px; margin: 5px 0;"></div> <div style="text-align: right; margin-top: 10px;"> <input type="button" value="Submit"/> </div>

Structure: data control issues

Each contribution needs to be uniquely identified and contextualised --for control of contextualised export of text flow (contributions) for pre-analysis (by WP4 partners in TECHNOLIFE). From this step (*Forum-1*) we plan to export all textual deliberations into simplified table data, structured as follows:

KEY	ParentID	DateTime	UserID	GroupID	RLineID	ScID	IssID	TEXT
serial	n	datetime	n	n	n	n	n	text body
"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"

The data format for each column is as follows:

KEY = unique numerical and serialised ID of each *contribution*

ParentID = numerical id of *parent* contribution (if relevant ie. threaded)

DateTime	= time stamp of each incoming contribution (datetimetosecond format)
UserID	= numerical ID of each <i>participant</i>
GroupID	= numerical ID of the <i>group</i> the participant belongs to
RlineID	= numerical ID of the <i>Research Line</i>
ScID	= numerical ID of the <i>Scenario</i>
IssID	= numerical ID of the <i>Issue</i>
TEXT	= large object variable (varchar or similar) for alphanumerical data, here the <i>text body</i> of each contribution.
VOTE	= 1 to 5 value (for F2 in technolife)

All data-structural contexts are represented in an XML output which applies to both Forum-1 and Forum-2 (see Appendix).

Intermission

Procedural considerations

What do datanalizers do (in collaboration with WP3 partners) ?

1. dump from database to table
2. take first-step analysis
3. select points for clarification
4. write the points into summaries (*New Issues*)

NOTE! There is really nothing to add at this stage about how analysis will proceed. What is important to keep in mind is that keeping track of procedures during *Forum-1* means ongoing analytic labour, albeit perhaps not that of formal analysis. Thus, persons analyzing the produced corpus, will be well acquainted with the data by the time of export. What we have so far called first-step analysis however, will be the beginning of a systematic bottom-up discursive / thematic analysis. In the early stages of that work (given the acquaintance with the data already), we should be able to feed back to KerDST a selection of unresolved, fuzzy, ambiguous points (issues/questions) for direct voting / evaluation on.

Forum-2

Procedural and interface considerations

What does the DO do?

1. installs the new sub-objects
2. invites participants to come back for voting (thanks them for all their good work and interesting deliberations)
3. keeps track of progressions
4. intervenes if necessary
5. exports data

NOTE! There is nothing else to add here about the “cognitive structure” of proceeding except for these reconfigurations, the most prominent being the set of voting options, either sliding bars or push-buttons depending on the nature of the vote/evaluation. Additional comments will be appended as contributions to the existing data table.

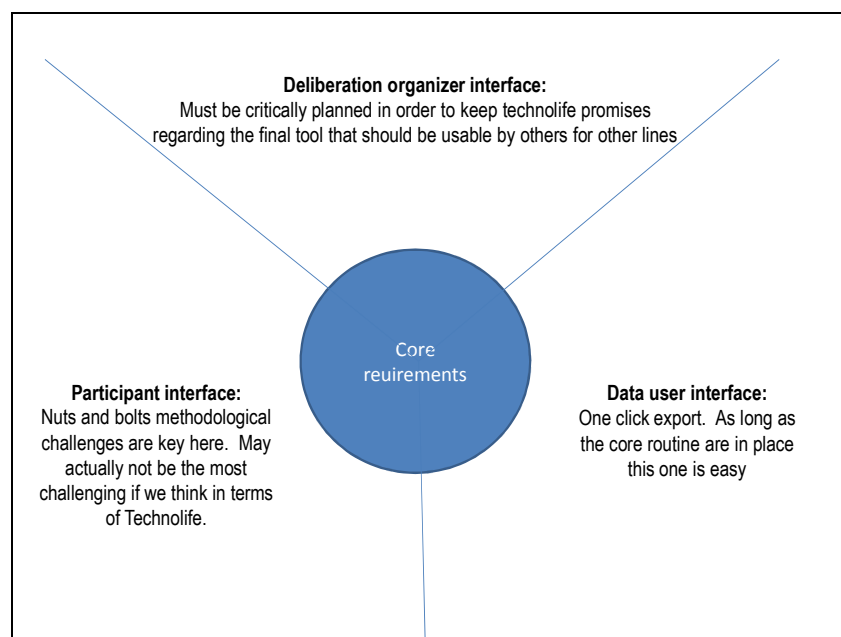
FORUM (GIS, ICT or BODY)

<p style="text-align: center;">Descriptive space</p> <p style="text-align: center;">Media-object Information Probe</p> <p>Scenario-New-Issues-overview-1</p> <p>Scenario-New-Issues-overview-2</p> <p>Scenario-New-Issues-overview-3</p>	<p style="text-align: center;">Voting and evaluation</p> <p>Scenario-x-Issue-y-thread (<i>title</i>)</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"><p style="text-align: center;"><i>Descriptive material</i></p><p style="text-align: right;">...read more ▾</p></div> <p style="text-align: center;">○ ○ ○ ○ ○ yes no maybe don't care don't know</p> <p style="text-align: right;">Add comment ...</p> <p>Scenario-x-Issue-y-thread (<i>title</i>)</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"><p style="text-align: center;"><i>Descriptive material</i></p><p style="text-align: right;">...read more ▾</p></div> <p>1 10 «----- -----» this phenomenon «----- -----» that phenomenon «----- -----» the other phenomenon «----- -----» and another phenomenon</p> <p style="text-align: right;">Add comment ...</p>
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PART 3 detailed requirements

The requirements that are described here are contingent on TECHNOLIFE's foreground, i.e. Ker-DST and its functionalities before the start of TECHNOLIFE. Reference to KerDST per se will therefore be sometimes omitted when they call for key existing functionalities.

In order to present the requirements associated with the pathway summarized in PART 1, we need to establish a distinction between core characteristics required and user (organizers, participants and data user) related requirements. These elements are graphically represented in the figure below:



CORE REQUIREMENT - Databases/table summary description:

Each research line/debate will be associated with a

- Research line/debate table/database containing/identifying (NODE)
 - Unique ID, Name of the research line/debate, description of the research line/debate, participants, the media spaces, the forum (fora), status, date invited, date created, date closed, last contribution, debate to which the participant has been invited.
- Participants table/database containing for each participant
 - Unique ID, e-mail, password, last login, Community to which the participant belong, rights (administrator or not), date invited date joined, date and time of contributions, status
- Media space databases

- Defining the entry point containing
 - Access to a user manual, access to the “initial challenge” (web based organized material), access to the forum-deliberation space.
- Scenario-defining media space containing
 - The media objects associated with each scenario, each scenario is associated with a unique ID
- Issue media space containing
 - The media objects associated with each issue, each issue is associated with a unique ID.
- Forum/deliberation space Databases
 - A forum/deliberation space belongs to a debate, is defined by one scenario and start with threads associated one to one with each issue
 - Each thread allows contributions by participants
 - The forum table contains the following elements associated with **each** contribution made by participants:
 - unique numerical and serialised ID, numerical id of *parent* contribution (if relevant ie. threaded), time stamp of each incoming contribution (datetimetosecond format), numerical ID of each *participant*, numerical ID of the community the participant belongs to, Unique ID of the Research Line/Debate, numerical ID of the *Scenario*, numerical ID of the *Issue*, large object variable (varchar or similar) for alphanumerical data, here the *text body* of each contribution, 1 to 5 value (vote).
 - Each forum database thus defines univoquely what in ker DST was the Matrix database.
- Export table
 - Contain information (date stamp, origin of request, e-mail where sent) about each data export that is requested.

DELIBERATION ORGANIZER Interface REQUIREMENT

The debate organizer must (1) set the general parameter of the debate, (2) enter the media objects deemed necessary for the "entry point" media space, (3) create the fora and set their parameter including forum specific media space, (4) associate participants to identified community and invite participants, (5) dump the forum tables in export format for data analysis, (6) intervene in the debates which will be described in the participant interface requirement.

(1) Setting the general parameter of the debate

The deliberation organizer must be able to

1. CREATE A DEBATE/RESEARCH LINE

- a. Create a new debate (a new research line) which consist of
 - i. Giving a name to the debate
 - ii. Entering a description of the debate
 - iii. Creating one or several fora, if several for a are created they can be so sequentially or simultaneously.
 - iv. Enter a specific e-mail address where persons interested in the debate or participants can communicate directly with the organizers

(2) Enter the media objects deemed necessary for the entry point media space.

2. CREATE A MEDIA SPACE FOR THE INITIAL CHALLENGE

- a. Associate to this debate the initial challenge media space, through uploading, which consists of a web page referring to the deliberation, its description, and containing the files associated with the initial challenge as well as a link to a simplified user manual, and a link to the fora.
 - i. This procedure should be as automated as possible thus generating a unique entry point to a debate.

(3) create the fora and set their parameter including forum specific media space

3. CREATE AND DEFINE ASSOCIATED FORUM (FORA)/DELIBERATION(S) INCLUDING ITS (THEIR) ASSOCIATED MEDIA SPACE

- a. Name the forum that is created; define the community, issues, scenario, set whether voting will occur (important voting must be optional).

- i. If the voting feature is enabled, set access to the matrix view, this must be changeable along the way
- b. Associate to each scenario and issue the associated media space, through uploading. Each of these media space consists of a web page describing the issue/scenario. This media-space in the form of a web page is automatically generated

(4) associate participants to identified community and invite participants

4. INVITE PARTICIPANTS AND ASSOCIATE THEM TO A COMMUNITY – DEFINE THEIR ACCES RIGHTS

- a. Enter the name, e-mail address and community affiliation for each participants
- b. Enter the text content of the invitation e-mail –may be generic per debate with access to personalization) which will include a link an a password for a first login (temporary user name for first login is the e-mail address, temporary password automatically generated).
- c. A “send” feature allowing for sending of the invitation e-mail.

(5) dump the forum tables in export format for data analysis

5. EXPORTING THE DATA

- a. The forum table must exportable in full the export procedure consists of sending the file as an e-mail attachment to an e-mail address that is entered (window to enter the e-mail address and submit button).

PARTICIPANTS interface REQUIREMENT

Participant must be able to (1) enter the deliberation process through an initial descriptive space leading them to the deliberation space (2) contribute textually to a deliberative forum associated with a Ker-DST vote; (3) explore the scenarios and issues; (4) key other features must be available.

Within the deliberation space single screen participants will have (A) a short scenario (con-) text and a short issue text hyperlinked to a detailed description (pop-up) NATURE OF THIS DESCRIPTION text images video etc. (B) Issue root thread starter -- short issue text hyperlinked to a detailed description (pop-up). (C) The various exchanges like in a forum (D) The contribution interface like in a forum , within this interface the voting feature will be made available (optional at discretion of the deliberation

organizer, within TECHNOLIFE we suggest a two step process, F1 deliberation on a text basis only and F2 , see above).

(1) enter the deliberation process through an initial descriptive space leading them to the deliberation space:

1. An entry point where participants log on and then choose on which scenario-issue combination they wish to discuss
 1. Access to a participant manual as well as to the various background materials is given to users
 2. One log-in corresponds to one participant and is associated to only one deliberation space (TECHNOLIFE's "Research lines").
 3. Each participant is defined as the member of one stakeholder group (TECHNOLIFE's "imagined community")
 4. The "deliberation organizer" control participation and access.

(2) contribute textually to a deliberative forum associated with a Ker-DST vote

2. For each scenario a "forum like" interface (past contribution combined with current).
 1. For past contribution contributors are at least identified through the community (stakeholder group) they belong to, if voting the nature of the vote is available as well.

(3) explore the scenarios and issues

3. The "forum" is contextualized by short although explicit Scenario text hyperlinked to the details
 1. Initial thread are "issue threads" associated to an a issue text (hyperlinked to a detailed issue description (pop-up))
 2. Scenario, issue and communities will need to be identified through three level of text:
 1. The "long" reference text describing the nature of the community/issue/scenario (content of the pop-up window (seen media space above))
 2. The "short but explicit" text always visible on the user interface
 3. And the (very) short name for matrix based representation.
 3. Each time a participant submit a contribution the text is stored

1. The various contributions are identified individually and associated with (the information described in the core database requirement.
4. When a vote is made – there is (behind the scene) a Ker-DST matrix that is being filled up
 1. The accessibility to this matrix must be optional for participants
 2. There is NO need to automatically update the matrix in real time
 3. The aggregation rules for colour coding (several participants in a single community) will be those developed within Ker-DST.- also in Matrix view requirement
5. User should not be able to delete/edit a past contribution but they are allowed to contribute as many time as they want to rectify previous post explicitly BUT they are allowed to change their vote or the list of indicator they use.
 1. We need to track these changes

(4) key other features

4. Debate organizer will have to belong to a particular class of participants in order to
 1. Intervene explicitly (see intervention above)
 2. Delete material that is deemed inappropriate for instance
5. Participants must have a way to enter in communication with the debate organizer out side of the forum (via the “debate e-mail address” (see above)

CORE matrix view REQUIREMENTS

The matrix view requirement is aligned on TECHNOLIFE's foreground, the major change lies in the access to the textual information

1. The matrix view interface can be the same for all user categories.
2. The access to the matrix view interface for participant must be optional
3. Deliberation organizers must be able to turn this access “on and off” within the course of the deliberation

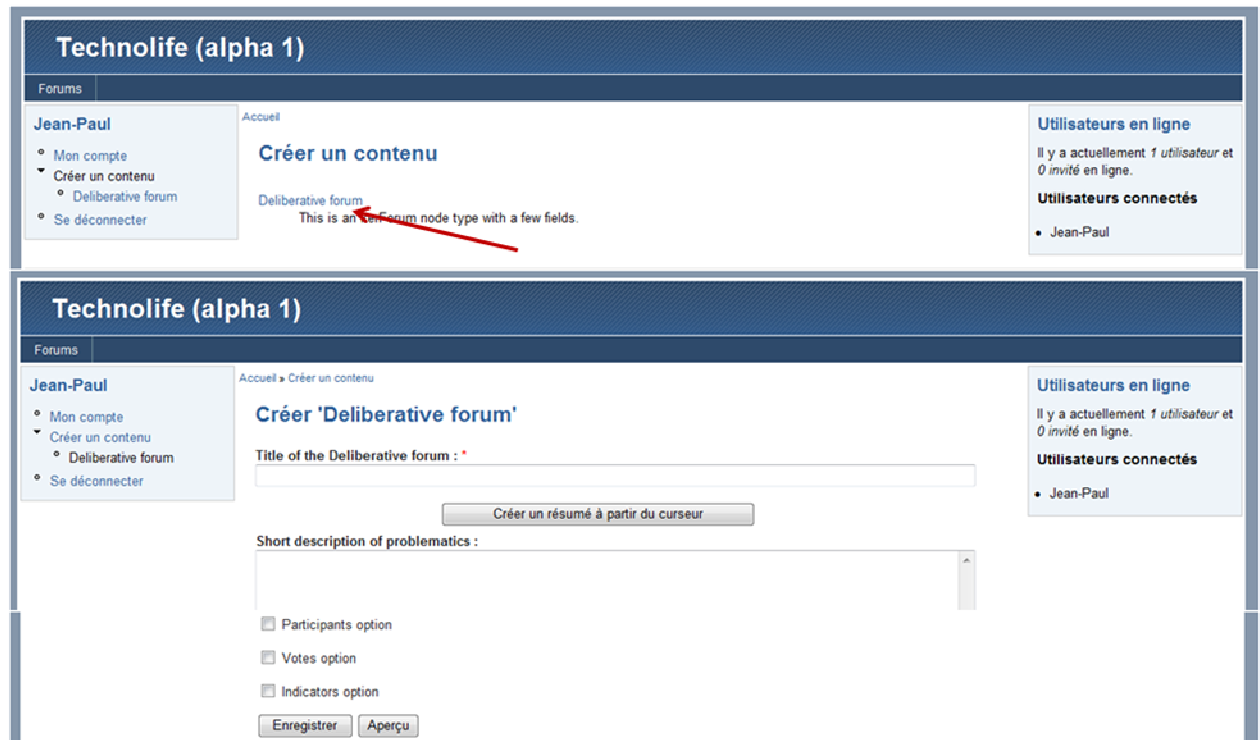
4. The aggregation rules for colour coding (several participants in a single community) will be those developed within Ker-DST if participants vote several times and change their votes it is the last vote that counts.
5. There is no need to update the matrix in real time, better to have regular daily update if real time update uses resources and slow down the process.
6. Colour coded spheres are clickable
 1. In 3D view, when a colour coded sphere is clicked, it opens a popup up window showing all the textual contributions from the community-scenario-issue triplet.
 2. In a scenario – issue 2D view [a community “slice is therefore selected”], when a colour coded sphere is clicked, it opens a pop-up up window showing all the contributions of the “sliced” community regarding the selected scenario-issue pair
 3. In a community – issue 2D view [a scenario “slice is therefore selected”], when a colour coded sphere is clicked, it opens a pop-up up window showing all the contributions of regarding the “sliced” scenario made by the communities on the issue (within the clicked community-issue pair)
 4. In a community – scenario 2D view [a issue “slice is therefore selected”], when a colour coded sphere is clicked, it opens a pop-up up window showing all the contributions of regarding the “sliced” issue made by the communities within the context of the selected scenario (within the clicked community-scenario pair)

PART 4 : Screen shot of the current alpha test interface

Access to deliberation organizer interface:



Setting the parameter of a forum:



Entering information on the debate (initial media space):

Technolife (alpha 1)

Forums

Jean-Paul

- Mon compte
- ▾ Créer un contenu
 - Deliberative forum
- Se déconnecter

Accueil » Créer un contenu

Créer 'Deliberative forum'

Title of the Deliberative forum : *

Short description of problematics :

The TECHNOLIFE project will develop new ethical frameworks to address ethical concerns of Europeans in relation to three technological fields: ICTs, Geographical Imaging Systems and converging technologies to enhance the human body. It will supply valuable insights on how issues of ethical concern to groups, publics and citizens can be considered in EC policy in the three technological fields. We use a novel approach to the research on ethical frameworks, using the concept of imagined communities as a way of getting to ethical concerns in ways that do not unduly suppress their complexity, heterogeneity and communicatively challenging character. The emphasis on information, communication and perception enhancing technologies is appropriate since these are strong promoters in the ongoing restructuring of social groups and imaginaries that go to make up the future Europe. They also transform the very meaning of human sociability, identity, communication and community in ways that pose great challenges to ethical theory and ethics for policy. Dominant imaginaries, ethical concerns and broad technological developments will be described deploying insights from a number of disciplines. These will be fed into an online database where they will be used for deliberation by a number of invited participants from concerned groups and publics. The results of the process will be analysed and interpreted to identify central imaginaries and their related arguments and viewpoints among the relevant groups. The qualitative data will then be used to: 1) develop new ethical frameworks fitted

• Les adresses de pages web et de messagerie électronique sont transformées en liens automatiquement.
 • Tags HTML autorisés : <a> <cite> <code> <dl> <dt> <dd>
 • Les lignes et les paragraphes vont à la ligne automatiquement.

Plus d'informations sur les options de formatage

Participants option
 Votes option
 Indicators option

Utilisateurs en ligne

Il y a actuellement 1 utilisateur et 0 invité en ligne.

Utilisateurs connectés

- Jean-Paul

Adding scenario and issue (initial textual media space)

Technolife (alpha 1)

Forums

Jean-Paul

- Mon compte
- ▾ Créer un contenu
 - Deliberative forum
- Se déconnecter

Accueil

Add a new scenario

Titre : *

Description : *

Most of the EC directorate are privatized.

Accroche : *

Utilisateurs en ligne

Il y a actuellement 1 utilisateur et 0 invité en ligne.

Utilisateurs connectés

- Jean-Paul

Entering the fora access space:

The screenshot shows the Technolife (alpha 1) forum interface. At the top, there is a navigation bar with 'Technolife (alpha 1)' and 'Forums'. On the left, a user profile for 'Jean-Paul' is visible with options: 'Mon compte', 'Créer un contenu', and 'Se déconnecter'. The main content area displays a thread titled 'The future use of Technolife's methodological results' with sub-navigation buttons: 'Voir', 'Catégories', 'Issues', 'Scenarios', and 'Modifier'. Below the title, there are two bullet points: 'Le forum 'Picture a world like the one we now today' a été créé.' and 'Le deliberative forum 'BAU' a été créé.'. A list of forum topics follows: 'BAU', 'Greens and Reds are all over the place', and 'Ultra liberalism dominates'. On the right, a sidebar shows 'Utilisateurs en ligne' (1 user) and 'Utilisateurs connectés' (Jean-Paul).

Contributing to a forum:

The screenshot shows the Technolife (alpha 1) forum interface for replying to a comment. The navigation bar and user profile for 'Jean-Paul' are consistent with the previous screenshot. The main content area shows a thread titled 'Participatory action research all over the place' with the subtitle 'EU's new moto: citizen's sustainable hapiness through enlightened centralization'. The original comment text is: 'By focusing on values isn't there a risk that we stop all research that is not participatory based'. Below this, there is a section for 'Ajouter un commentaire' and 'Répondre'. The form includes fields for 'Votre nom : Jean-Paul', 'Objet :', and a large text area for 'Commentaire : *'. The right sidebar shows 'Utilisateurs en ligne' (1 user) and 'Utilisateurs connectés' (Jean-Paul).

Technolife (alpha 1)

Forums

Jean-Paul

- Deliberative Forum
- Mon compte
- Créer un contenu
- Se déconnecter

Accueil » Forums » The future use of Technolife's methodological results » EU's new moto: citizen's sustainable hapiness through enlightened centralization

Participatory action research all over the place

Voir Scenarios Issues Catégories

Sourmis par Jean-Paul le jeu, 11/05/2009 - 08:29 **EU's new moto: citizen's sustainable hapiness through enlightened centralization**

By focusing on values isn't there a risk that we stop all research that is not participatory based

Gee!! Technolife is being used to manipulate the crowds >

Ajouter un commentaire

Great - do you remember the cold war int. development era nouveau

Par Jean-Paul, le sam, 11/07/2009 - 09:11.

You this reminds me of this story. In ancient time, during the cold war, when the western world was still trying to accompany the gloabl south on a occidentalocentred development path, participatory planning was a must. This led to several standstill situation that were distressing for the workers of vedvelopment agencies. yet ofr the population this as great because through the procedural inadequacy of this participatory approach they could stall a process they did not desire, while benefitting of the perks associated with participation (free meals, car ride to the market or th hospital, reinforcement of local power structure etc..

[modifier](#) [répondre](#)

Commentaires récents

- Great - do you remember the cold war int. development era il y a 0 s

Utilisateurs en ligne

Il y a actuellement 1 *utilisateur* et 0 *invité* en ligne.

Utilisateurs connectés

- Jean-Paul

Technolife (alpha 1)

Forums

Jean-Paul

- Deliberative Forum
- Mon compte
- Créer un contenu
- Se déconnecter

Accueil » Forums » The future use of Technolife's methodological results

EU's new moto: citizen's sustainable hapiness through enlightened centralization

- You are not allowed to post a new forum topic.

Forum	Sujets	Messages	Dernière contribution
▣	Participatory action research all over the place	Jean-Paul, jeu, 11/05/2009 - 08:29	
▣	Gee!! Technolife is being used to manipulate the crowds	Jean-Paul, jeu, 11/05/2009 - 08:20	

[RSS](#)

Utilisateurs en ligne

Il y a actuellement 1 *utilisateur* et 0 *invité* en ligne.

Utilisateurs connectés

- Jean-Paul

APPENDIX 1 : definition of XML output file (semi-encoded):