Inspire Policy Making with Territorial Evidence

USER MANUAL //

ESPON tool for mapping soft territorial cooperation areas and initiatives

Monitoring and Tools // June 2022

Co-financed by the European Regional Development Fund

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1 Welcome
   to the ESPON ACTAREA web app!

The ESPON ACTAREA web app is a drawing tool for schematic maps ('Mapshots') and syntheses of how administrative areas, institutional areas of jurisdiction and influence are spatially organised ('Institutional Maps). Itis designed to be used in workshops, as part of collaborative processes.

These workshops can be face-to-face or virtual, monolingual or multilingual, with or without breakout groups. They can be organised in a single sequence, or multiple successive sequences.

This user manual primarily targets workshop facilitators. The web app is designed to be used by workshop participants without recourse to a manual. All workshops need to be coordinated by a facilitator.

In this user manual you will find text boxes with three recurring pictograms:

Points of information

Hints on how can make even better use of the ACTAREA web app

Warnings

1.1 Schematic representation of cooperation territories: Mapshots

Planning practitioners, civil servants, entrepreneurs, the "woman and man in the street" all have spatial representations of the territories in which they live or act in. These representations impact their daily mobility (what is far away? What is close?), the territorial development projects they will believe in and support, the ways in which they identify themselves with their geographic surroundings.

The ESPON ACTAREA web app is a tool for policy makers and anyone interested in collaborative approaches to territorial development that brings together academic research and practical experiences using mental maps[1], and theories of geographic modelling using schematic maps[2].

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[1] See e.g. the 2018 special issue on Mental Maps of the Journal of Cultural Geography, and the pioneering works of Kevin Lynch (*The image of the City*, 1960) and Peter Gould (*Mental Maps*, 1974).

[2] Referred to as « Chorèmes » in the French literature, see Brunet, Roger (1980) « La composition des modèles dans l'analyse spatiale », in L'Espace géographique, no 4 and Brunet, Roger (1987) *La Carte mode d'emploi*, Fayard/RECLUS

Its first objective is to make it possible to organise dialogues on geographic representations between a broad range of stakeholders. They are given the opportunity to complete assignments by using tailor-made drawing tools. Their respective inputs can then be compared.

The second objective is to jointly elaborate a consensual geographic representation. This can be the least common denominator of different contributions. However, experience shows representations evolves during stakeholder dialogues. The consensual representation will often be a representation all involved parties consider reasonable after a dialogue process. In some cases, a participatory process may make it obvious that different representations prevail among the stakeholders, and that these are not reconcilable. In this situation, the ESPON ACTAREA web app makes it possible to synthesise these different, unreconcilable representations.

We call these representations **Mapshots** (i.e. "mugshots" of territories).

Figure 1 Example of a cross-border Mapshot: the Lake Constance region
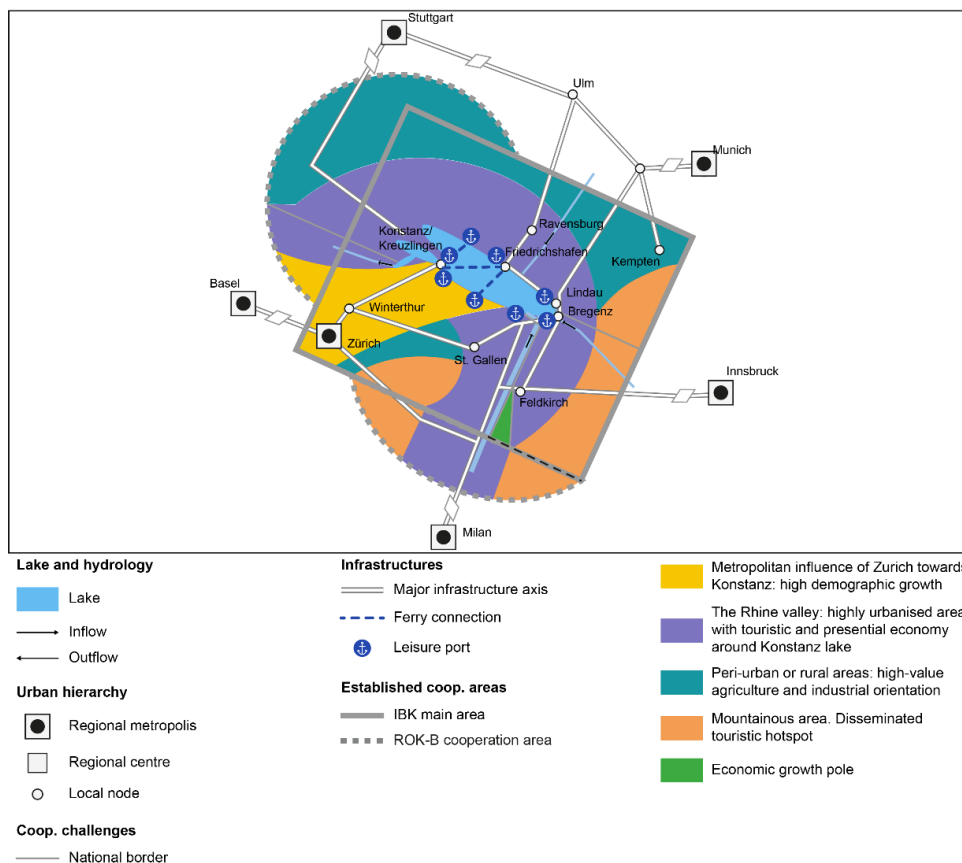
Figure 2 Example of a transnational Mapshot: the Danube macroregion

Cooperation scope

━━━ EUSDR area

TEN-T network Strengthening TEN-T infrastructures

━━━ TEN-T corridor (double)

━━━ TEN-T corridor (simple)

━━━ TEN-T corridor (W. Balkans extent)

⚓ TEN-T port

Major cities

◯ Top-tier urban agglomeration

● Capital city

Cooperation rationale

▦ Protection of the river as a common

↔ Foster waterway traffic

Differentiated involvement in transnational cooperation (partnerships / inh)

■ High

■ Medium

■ Low

Cooperation challenges at the borders

━━━ High GDP/inh differential >2x (2019)

━━━ Other national borders

External pressure / normative influence

EU: European Union
RU: Russia
CN: China

Figure 3 Example of a regional mapshot: the coastal region and maritime exclusive economic zone of of Lithuania

Partnership extent

━━━ Coastal strip (core area)

┈┈┈ Maritime projection

Urban hierarchy

◉ Metropolis

◯ Regional centre

○ Local regional centre

Inland transport corridors

═══ Major

━━━ Secondary

■ International maritime route

━━━ Secondary (waterway)

Cooperation gaps

━━━ National border

━━━ Regional border

Territorial-functional development
International services / functions

◆ Industrial/port complex

★ Recreation centres

● Knowledge economy centre

National / regional functions

■ Energy production

■ Military activities

■ Urban agglomeration

■ Residential pressure

■ Environment and landscape protection (CDDA categories II-IV-V)

1.2 Syntheses of institutional coexistence in cooperation territories: Institutional mappings

The ESPON ACTAREA web app can also help groups of stakeholders to build **institutional mappings**.

Institutional mappings synthesise geographic overlaps of administrative units and cooperation areas of relevance for the targeted cooperation initiative. They help to understand the institutional context in which a territorial cooperation initiative is embedded. Institutional maps synthesise the spatial organisation of political/administrative units and cooperation areas in a highly simplified way: which ones overlap, occupy adjacent areas or are embedded in each other on different scales. Institutional maps help discerning patterns of cooperation:

- Institutional maps make it possible to take stock of existing cooperation initiatives which are relevant for the promotion of the soft cooperation area.

- The mappings can indicate the degree of the 'institutional thickness', i.e. the number of the cooperation initiatives in a specific territory.

- Moreover, in some cases, a spatial concentration of cooperation initiatives can be observed, for example in metropolitan core areas or around a specific geographical feature.

- The mappings visualise multi-level governance. Some cooperation initiatives operate in a context with multiple relevant bodies on the same level, while others relate to systems of administrative units and cooperation initiatives embedded in each other, which are thus of multi-level character.

A shown in the examples below, institutional maps are drawn by using a more limited range of drawing tools than Mapshots. The two main types of shapes drawn are rectangles (to symbolise areas of jurisdiction, operation, influence or cooperation of each actor) and lines (to symbolise borders). To this, one may add punctual symbols to represent actors with a limited area of. Lines connecting these punctual symbols represent networks (as exemplified in Figure 4 with the representation of the "Städtebund Bodensee" network of towns and cities). This figure can usefully be compared to the Mapshot of the same area (see Figure 1 p. 8)

An institutional mapping can be used to illustrate institutional dynamics associated to a cooperation initiative, e.g. the Halland intermunicipal cooperation initiative which benefits from variable support from regional authorities (see Figure 5). In other contexts, the focus may be on multilevel territorial governances, e.g. the Newry-Dundalk gateway in the Belfast–Dublin corridor, in the context of cross-border cooperation between Northern Ireland and the Republic of Ireland (see Figure 6).

Figure 4 Example of Institutional mapping of the Lake Constance region
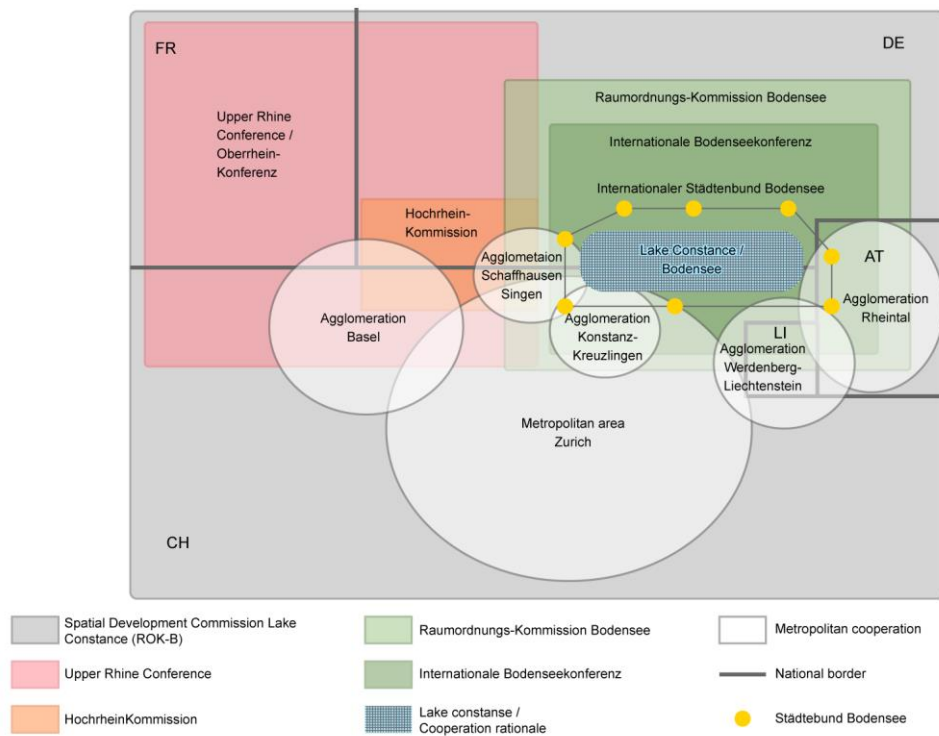
Figure 5 Example of institutional mapping of the Halmstad (Sweden) intermunicipal cooperation initiative
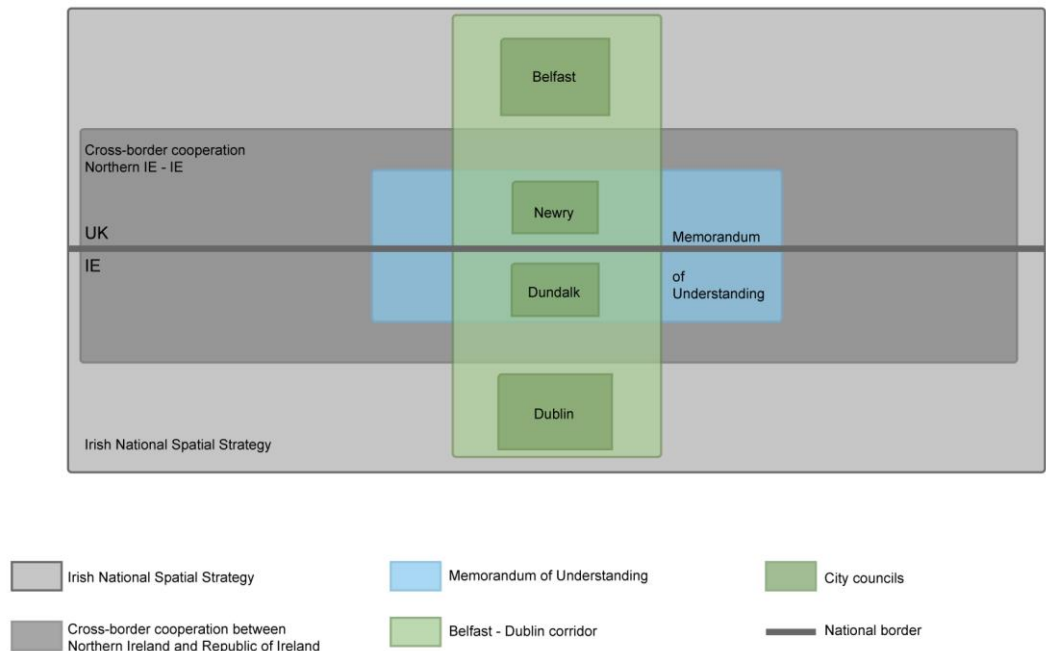
1.3   Preparatory steps and general principles

As for any other workshop, an ACTAREA workshop requires careful planning by the **workshop facilitator**. We encourage you to ask yourself questions such as these as part of the preparatory steps:

- What is the purpose of the workshop? What do you want to achieve?

- How many participants should be involved? What are their profiles, and why would they be interested in contributing to the achievement of the workshop's purpose?

- What resources are available? How much time are the participants prepared to allocate to this process? Should you foresee one long workshop, or multiple shorter ones?

- Would the entire process be organised around the ACTAREA web app, or is this just a component of a wider process?

- What's the starting point? What can you presume that participants already know? What can they be expected to agree on?

- Would you like discussions to be based solely on the perceptions and knowledge of participants, or also on expert knowledge? How should this expert knowledge be brought into the process? Do you want experts to be included in the list of participants, do you want to share expert knowledge with the participants before or during the workshop?

Answers to these questions help to get a more precise picture of how you may use the ACTAREA web app. This for example helps to:

- Formulate questions contributing to the achievement of the objectives of the process, and for which it makes most sense to provide answers using schematic drawings.

- Decide on the starting point for discussions. How can one draw the outer borders of the envisaged territory? What geographic elements can be included as pre-drawn reference content? These are geographic features such as urban nodes, transport axis, rivers and borders relative to which participant will position their inputs.

- Organise a stepwise process: which points need to be clarified first? How can one progressively enrich the discussion on the spatial structuring of a territory, its meaningful subdivisions, historical dividing lines and cooperation axes, bottlenecks, conflicts of interest, external influences, development corridors…?

- Decide whether the process should be organised by dividing the participants in groups, or asking them provide inputs individually.

- Determine the time needed to arrive at the desired outcome. This is best done by subdividing the process in small steps, and estimating the time needed for each of them.

2 First steps

The steps below are also described in videos. You can watch these videos here.

2.1 Choosing your interface language

At the top left, you can select the language in which the ACTAREA web app should be displayed. This interface language can be changed at any time.

The "interface language" is not necessarily identical with the "process language":

- Interface language: language in which tools, fields, buttons and tooltips are displayed;

- Process language: language of the questions submitted to participants, of the inputs and comments they provide.

The process language is defined when setting up a process (see section 3.1). Multilingual processes have multiple process languages. Each participant can change the displayed interface language and process language at any time.

2.2 Registering as a user of the tool

All users of the ACTAREA Web App need to register. The registration process is identical for process facilitators and participants. First click the "Sign up" button in the top banner (see Figure 7).

Figure 7 The top banner
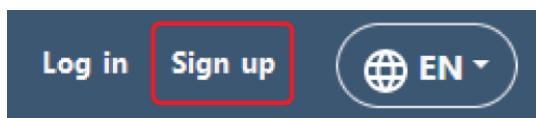
This brings you to the registration interface (see Figure 8). The fields "first name", "last name", "Email", "password" and "confirm password" are compulsory. Other fields are optional.

The "language" field is used to identify your preferred process language. The web app will then by default select this process language when it is available. Display and process languages can be changed by the participant at any time.

To finalise your registration, click on the link sent to the indicated mail address. If you can't find it in your inbox, check the spam filter.

You can change your password at any time.

Figure 8 The registration interface

Once the registration process is completed, you access your personal space that lists:

- Processes you have initiated, of which you are the facilitator.

- Processes you have been invited to participate in.

Open and closed processes are listed in two separate columns.

> **Each user keeps control of how she or he
> is known to other users of the web app**
>
> When inviting you to participate in a process, the process facilitators fills in a standard table with emails, first names and surnames. This helps the facilitator to keep track of who is who, as email addresses are not always explicit in this regard.
>
> However, as soon as a participant accepts an invitation, the information she or he provides in the registration form replaces the data in the facilitator's list.
>
> Each participant can change his or her personal information during a process. However, the email address cannot be changed.

3 Setting up a process

Once you have registered, you may start to set up an ESPON ACTAREA web app. Just click on your name and select "Start a new participative process" from the Dropdown menu (see Figure 9).

You then get two options:

- Create a process from scratch;

- Create a process on the basis of a template.

Figure 9 Dropdown menu with 'Start a new participative process' option

Processes

Start a new
participative process

My profile

Log out
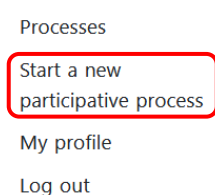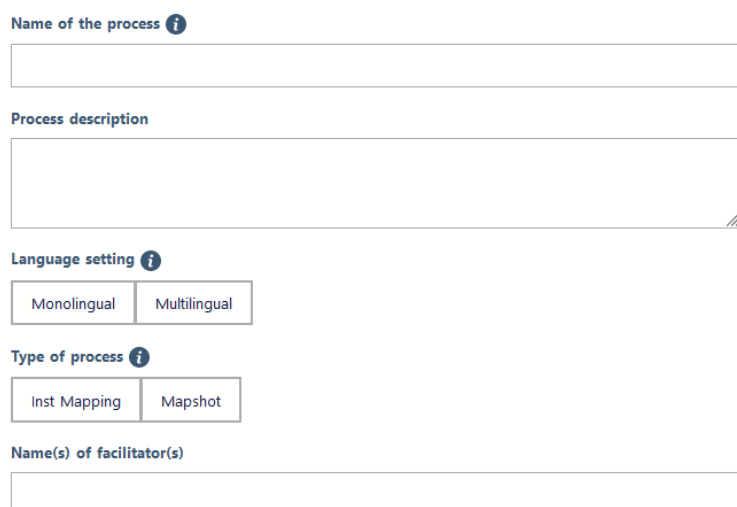
A template is a process created by another user, without information on invited participants, inputs provided by these participants and syntheses of results. When you open a template, you find a ready-to-use process which you can adapt to your needs. This revised process can then also become a template accessible to other users. More details about how you create template can be found in section 3.3.

3.1 Process information

The first step when you create a process is to provide some general information, using the form shown in Figure 10.

Figure 10 Interface to provide information about the process

Name of the process ⓘ

Process description

Language setting ⓘ

| Monolingual | Multilingual |

Type of process ⓘ

| Inst Mapping | Mapshot |

Name(s) of facilitator(s)

- Name of the process & process information will be included in the invitation mails sent to participants. You should make sure that the process name and description are understandable and appealing to the participant.

- You then indicate whether the objective of the process is to produce a Mapshot or an Institutional Mapping (see section 1.1). Depending on the option chosen, different drawing tools will be available.

- A process can be multilingual or monolingual. If you chose to organise a multilingual process, each participant my select in which language assignments and drawing tool names will be displayed (see section 3.7). By default, the language selected when registering is displayed, if it is one of the process languages. It will then be possible to write participant assignments and to name customised drawing tools in the selected languages.

You can ignore invitation mails altogether!

Invitation mails are automatically sent to all participants. This is a way of ensuring that all participants are informed that someone has included their email in a list of of potential participants to an ACTAREA process.

Unfortunately, these mails (1) tend to end up in participants' "spam" (2) are always in English (irrespective of the process language(s) you select).

However, these emails can be ignored entirely: participants that have created a profile with the same email address as the one you sent the invitation to will find your invitation in their list of processes when they log in. They then just have to click "yes" to participate.

There is therefore no need for your process participants to retrieve the invitations from their spam folder if they can't find it. Just ask them to register as ACTAREA users with the same email address as the one you used to invite them.

You can generate a series of user logins and passwords that are not associated to any user *a priori*

Gmail aliases make it possible to generate a series of logins, that you validate yourself and that you can then send to the process participants.

The advantage with this solution is that you're not bound to a specific list of participants, e.g. if a specific participant is inavailable on the day of the workshop and would like to be replaced by someone else, or if someone expresses interest in participating after you sent out invitations.

To use Gmail aliases, you first have to create a a Gmail account on www.gmail.com.

Then include Gmail aliases in the list of participants. An alias is an additional email address associated with your email account. An alias uses the same inbox, contact list, and account settings as your primary email address. You can create it by adding the symbol + after your email. For example: if your email is user@gmail.com, the alias could be user+actarea-user1@gmail.com or user+actarea-user2@gmail.com.

You will have to register each "alias" as a separate ACTAREA web app user. You then receive the confirmation links for all these "aliases" in your Gmail inbox.

If you decide to send the alias login (i.e. the full gmail address with the alias) and the corresponding password (that you registered on the ACTAREA web app) to a specific user, this person may edit the First Name and Last Name on the ACTAREA web app, so that other participants identify her or him more easily.

It can be a good idea to add a few gmail aliases to a list of participants with traditional email addresses and predefined names and surnames. This gives you some flexibility in case a last minute participant should be added, or if there was a typo in one of the email addresses in your invitation list. User profiles corresponding to these aliases do not necessarily need to be created when you send out invitations. You only have to register them if you actually need to use the aliases.

When using gmail aliases, it is important to ensure that the process you facilitate remains compliant with the European General Data Protection Regulation. Personal information associated to an alias must not be stored without the express permission of that person, and must be deleted when the process is finalised.

Designation of process name and process description in multilingual processes

Each process has a "generic" name and description. The web app will not ask you to associate a language to this name and this description. This is because the system needs to assign a unique name and description to each process.

However, if you select the "multilingual process" option, you can provide translations of the name of the process and its descriptions in multiple languages. These translations then come in addition to the generic name and description.

These generic names and descriptions can be uses in different ways:
- You can write the process name in the language you as facilitator are most fluent in. This makes it easy for you as facilitator to identify the process in your list of processes.
- You can include process name and descriptions appear in all process languages, i.e. concatenate all translations (e.g. "Process name in French / Process name in German"). This way, all participants will find it designated and described in their language in their list of processes.

- The list of available languages includes a list of European languages, sorted alphabetically on the basis of the Latin transcriptions. Next to each language, you will find the corresponding ISO-639 code. The codes of selected languages will appear next to the fields in which you write participant assignments and drawing tool name.

- The "Name of organiser" field makes it possible to define the name of the organiser(s) should appear to the participants. If you are co-facilitating the process with someone else, you make for example choose to display both names.

- The Background image is an optional starting point and reference map for a Mapshot. It can help the facilitator to geographic position features, to draw limits between different types of areas, etc. It can be displayed or hidden at any time of the process, and will always appear behind all other elements drawn. The background image will not be included in the final Mapshot. As illustrated in Figure 11, this background image will only be useful

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💡 **You can also produce the reference area
with a vector drawing tool such as Inkscape or Adobe Illustrator**

This is particularly useful when the contour of the reference area includes curves, as it is not possible to draw Bézier curves with the ACTAREA web app.

Remember that the reference area shape must have a fill colour. It should not be too complex.

❗ **The ESPON ACTAREA web app is designed to produce schematic representations, not maps!**

When you produce a Mapshot, the objective is to remove all the 'noise', and represent only essential graphic elements. In most cases, this implies that a topographic map, aerial photography or remote sensing image will not function well as background image.

Figure 11 Example of background image and reference area for the Alpine Region
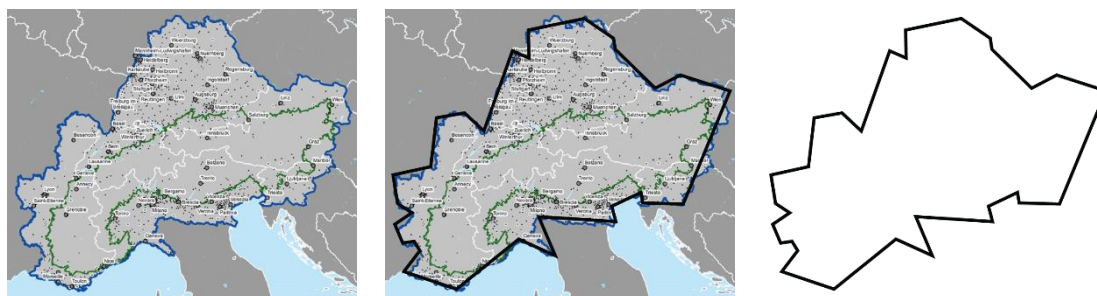
The background image to the left can be used to draw the simplified borders of the cooperation area (middle figure). These simplified borders become the "reference area" of the Mapshot (see section 3.4.2). They can be drawn using vector drawing software, e.g. Inkscape or Adobe Illustrator, and then imported in SVG format, or directly in the web app.

> **Uploading the background image**
>
> The backround image can be in jpg, png or svg format.
>
> It can be resized in the web app. If you want to generate a background image that fits the drawing canvas exactly, it should be 800 pixels wide, and 450 pixels high

3.2   Design settings for Mapshots

The interface to define design settings is located below the process information. These compulsory settings will help you to use fill colours and patterns in a consistent way in Mapshots.

For this purpose, you can select one or more colour and pattern palettes that correspond to the types of patterns or trends you want to display. When you've selected a pattern, this limits the colour or pattern options available when customising a drawing tool. This way, you ensure that you use colours or patterns in a consistent way.

The ESPON ACTAREA web app offers three types of colour palettes for Mapshots:

- A typology palette, with equivalent colours (see Figure 12). This palette is used to identify different types of areas, e.g. areas with different types of economic specialisation, where different languages are spoken, which are urban, rural or suburban.

- A ranking palette, with different intensities of a colour (see Figure 13). This palette is used to express intensities of a phenomenon, e.g. income or unemployment levels, degrees of exposure to a hazard.

- A deviation palette, with different intensities of two colours and, as an option, a "neutral" colour (see Figure 14). This palette is used to express deviations from a significant value, e.g. an average, median or zero. One can for example distinguish between areas with positive or negative demographic trends, unemployment above or below the regional average. The neutral category can be used for areas with values close to the chosen average, median or zero value.

Similarly, you can select three types of pattern patterns (see Figures 16, 17 and 18).

You can display two spatial characterisations of areas on top of each other by combining colours and patterns. Patterns are normally black, to minimise potential interference with background colours.

Figure 12 Typology colour palettes

Figure 13 Ranking colour palettes

Figure 14 Deviation colour palettes

Figure 15 Deviation colour palettes with a neutral « middle » colour
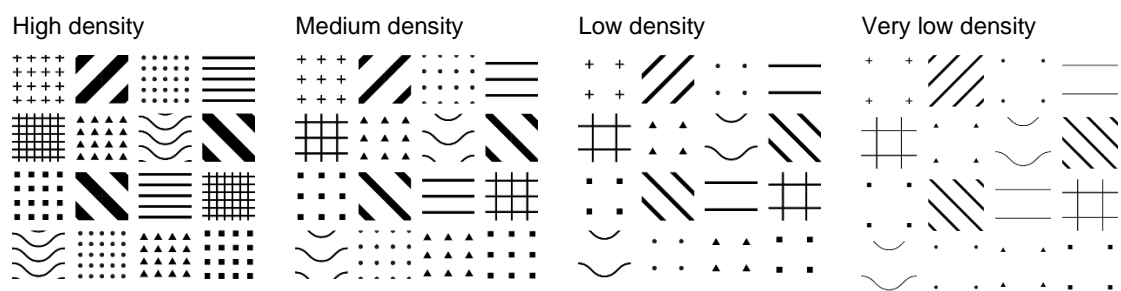

Figure 16 Typology pattern palettes

High density   Medium density   Low density   Very low density

Figure 17 Ranking pattern palettes

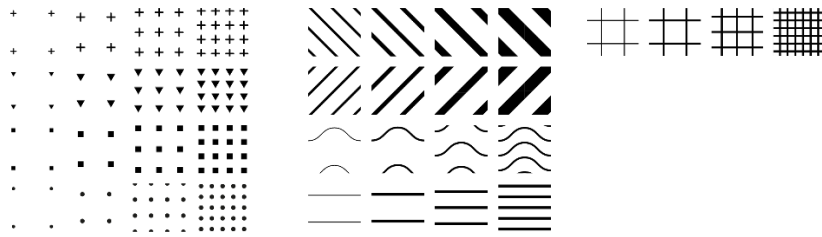Punctual symbols   Lines   Grid
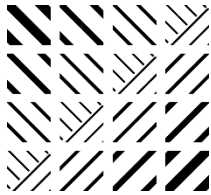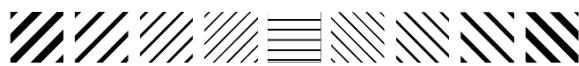
Figure 18 Deviation pattern palettes

Figure 19 Deviation pattern palettes with a neutral "middle" pattern

3.3 Sharing process information and creating templates

Below the interface to define design settings, you will find two tick boxes:

- The first tick box allows you to ensure the confidentiality of your process (see Figure 20). The ESPON EGTC is interested in reviewing processes that are set up on the ACTAREA web app, e.g. to better understand how it is use and to identify possible needs for further developments. If you tick this box, the ESPON EGTC will not have access to any information about the content of your process.

- The second tick box allows you to generate a publicly available template on the basis of your process. This will make it possible for other users to reuse the layer configuration, questions and drawing tools you have generated. Your process setup will be reviewed by the ESPON EGTC before it is made publicly available. You may send an email to actarea@espon.eu if you have questions about this review process.

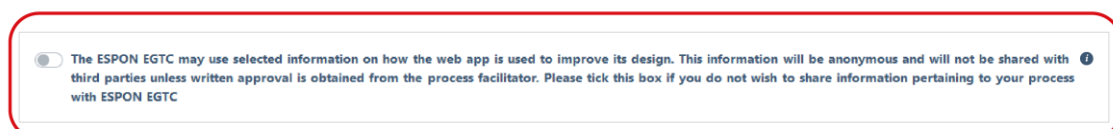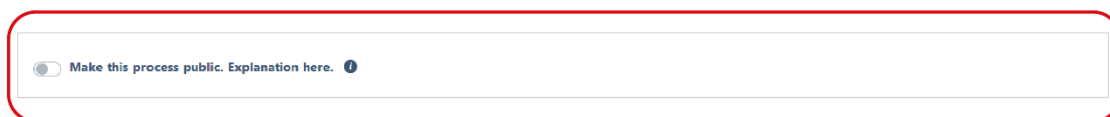**Figure 20 Option to ensure the confidentiality of your process**

The ESPON EGTC may use selected information on how the web app is used to improve its design. This information will be anonymous and will not be shared with third parties unless written approval is obtained from the process facilitator. Please tick this box if you do not wish to share information pertaining to your process with ESPON EGTC

3.4   Process features - Mapshots

As a second step, process features can be defined, using the interface shown in Figure 22. We successively deal with Mapshot process features (this section) and Institutional mapping process features (section 3.5 below).

Mapshot process features include:

- The different layers in which drawings shall be produced. Most layers are normally associated with one or more questions submitted to the participants, to which they reply by producing drawings. Some layers only provide reference elements, as described below. Layers are added by clicking the "add new layers" button (see Figure 22). The next steps for adding layers are described in section 3.6)

- A "reference area" layer with the outer borders of the cooperation area to be drawn. This layer cannot be edited by the participants. For each other layer, the facilitator can decide whether participants should be allowed to draw features only within the reference area, or across the entire canvas. This helps to ensure that participant inputs correspond to expectations.

- A "reference content layer" with some key geographic features such as urban nodes, transport axis, rivers and borders relative to which participant will position their inputs. The reference content layer will be included in all pdf exports of participant inputs. You may choose to position on top of all other layers. Participant inputs will then appear behind reference content. You may also to position it below some layers, and above others. In this case, participant inputs to layers positioned above the reference content layer will hide the reference content.

- The structuring of the legend. Mapshot legends are generated semi-automatically. Each type a new type of geographic feature is drawn by a participant, a corresponding legend item is added. Legends are always organised in three columns, with the elements from each layer grouped together in one bloc. The bottom part of the "process feature" interface (see Figure 22) makes it possible to determine in which column and in which order these legend blocs should be displayed. Unnecessary legend items can be deleted by the participant.

- Drawing tools. The facilitator makes drawing tools available for participants. These drawing tools are selected and customised by clicking the "customise drawing tools" button in the left part of the process features interface (see Figure 22). You can only add drawing tools to layers that have previously been added. The next section provides more details on the notion of "drawing tool".

Figure 22 Interface to define Mapshot process features
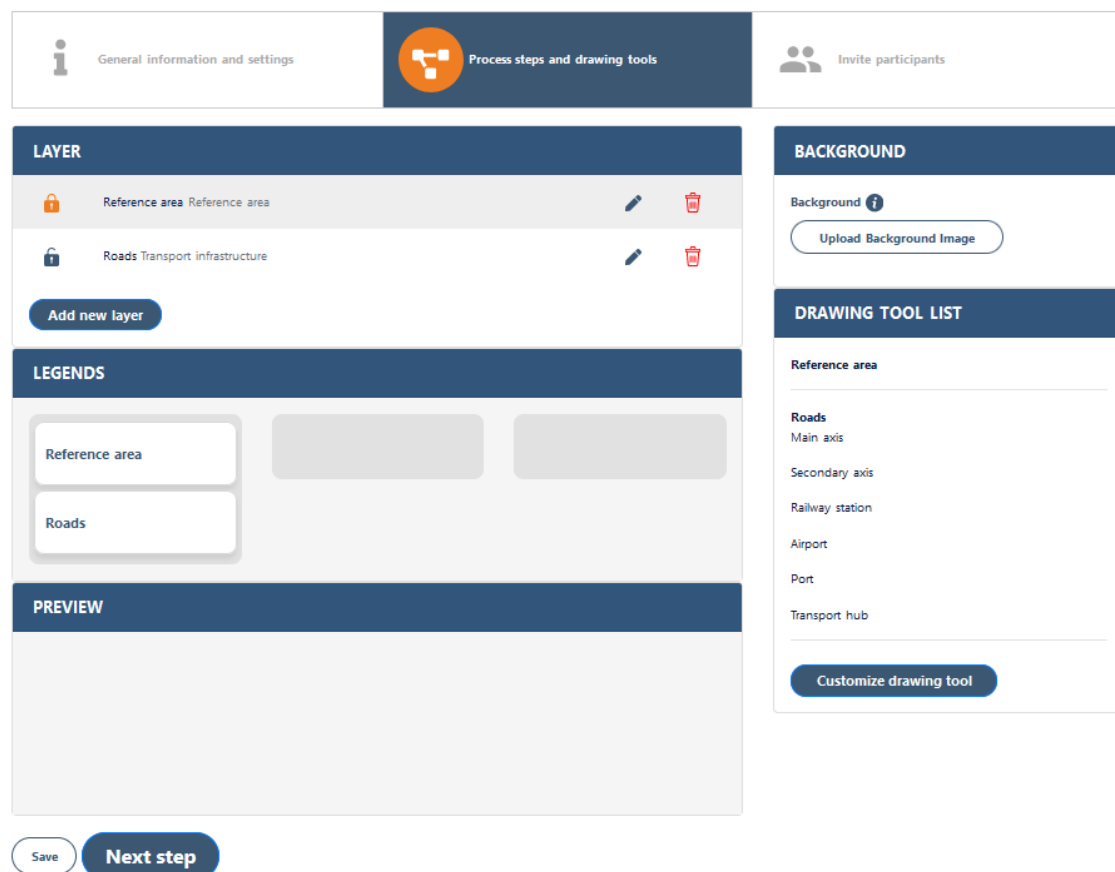
3.4.1 Customising drawing tools

Mapshots drawing tools can be:

- Narrowly defined, e.g. "a thin, red and curved line",

- Broadly defined, e.g. "any type of surface, with any fill colour and any contour line width".

A narrowly defined drawing tools (first example) is easier and faster to use by the participant. A broadly defined drawing tool allows for a greater variety of responses.

Only one category of shapes can be drawn with one drawing tool, i.e. surfaces, lines, points or arrows.

> **Naming drawing tools**
>
> Drawing tools are used to draw geographic features. You should refer to these features in the name, rather than to the geometric characteristics of the tool.
>
> For example a drawing tool intended to represent a border will be called "border", not "back line".
>
> Drawing tool names also function as default legend text. This default text can be amended by the participant.

Drawing tools are subdivided in the following groups and subgroups:

- Lines

  o Curved lines

  o Straight lines

  o Polylines

  o Railways

  o Coastlines

  o Canals

  o Major roads

  o Intermediate roads

- Surfaces

  o Curved shapes

  o Polygons

  o Circles

  o Rectangles

  o Hexagons

  o Stars

  o Mountain areas

  o Wetland

- Points

  o Pictograms

  o Geometric points

  o Urban hierarchy

- Arrows
    - o Simple/straight arrows
    - o Predefined arrows (with more complex shapes)

All these drawing tools can be customised with different fill colours or patterns, stroke widths, stroke colours, stroke types (continuous or dashed). A wide range of options are therefore available. The options available for lines are illustrated in Figure 23.

When customising a drawing tool:

- Tick boxes in front of the subtypes that should be accessible to the participant under this drawing tool;

- Lock the drawing parameter (e.g. colour, stroke thickness) if this should be the only option available to the participant. If you unlock a parameter, this implies first option selected by the facilitator is applied by default, but that the participant may also choose other options.

As a general rule:

- only provide the drawing options that will be useful to participants,

- avoid, to the extent possible, offering "multi-purpose" drawing tools. Each drawing tool should serve one purpose only. For example, instead of offering one drawing tool for transport axes, with two line width options for (thick lines for "major axes", and thin lines for "minor axes", you should propose two separate drawing tools respectively entitled "major transport axes" and "minor transport axes".

Figure 23 Editing of drawing tools

Edit drawing tool

Name

Default tool arrow   🌐 EN

Design

Select one category

Lines   ⌄

Show		Type	Stroke	Stroke width	Stroke type
☑	〰	Curved line	🔒 🔴 🟣 🟢 ⚫	Extra thick ⌄ / Extra thick / Thick / Medium / Thin / Extra thin	⌄
☑	╱	Straight line	🔒 🔴 🟣 🟢 ⚫		⌄
☑	⟋	Railway	🔒 Add		
☑	⎴ ⎵	Coastline	🔒 ○		
☑	╱╱╱	Canal	🔒 Add		
☑		Major road	🔒 Add		
☑		Intermediate road	🔒 Add		
☑		Positioning in relation to an external influence	🔒 Add		
☑		Interrelation	🔒 Add		
☑		One-way relation	🔒 Add		
☑		Organisation around a feature or resource	🔒 Add		

Figure 24 Overview of drawing tools

> **Tips regarding drawing tools**
>
> Using narrowly defined drawing tools makes it easier to compare inputs from different participants. When they all use the same colours, shapes and symbols, representations become immediately comparable.
>
> However, the types of inputs participants wish to provide in response to an assignment are often difficult to foresee. If drawing tools are too restrictive, they may feel constrained to provide an answer they are feel is incorrect or insufficiently nuanced.
>
> You may for example wish to make it possible to draw dashed lines in addition to continuous lines, or make multiple colours available "just in case".
>
> You may for example provide one "standard" drawing tool corresponding to the inputs you foresee as facilitator, and another broadly defined defined drawing tool "just in case". You can then indicate that the latter drawing tool is only to be used if the former "standard" is deemed inadequate.
>
> For example, participants may feel uncomfortable delineating commuting areas using a "curved shape surface", because they don't have enough information to set boundaries. You may then "as a back-up" provide an arrow drawing tool as a "back up", making it possible to represent approximate origins and destinations of made travel-to-work flows.

3.4.2   Predefined layers for Mapshots

In order to make it easier to navigate among the numerous drawing tool options, the ESPON ACTAREA web app includes 9 predefined layer types for Mapshots:

- Reference area

- Reference content

- Urban nodes

- Points of interest

- Cooperation rationale

- Physical features

- Transport infrastructure

- Borders / discontinuity / gaps

- Characterisation with colours

- Characterisation with hatchings

- Generic – no default drawing tools

Each of the predefined layers include a set of by default drawing tools. As a facilitator, you can use these drawing tools as a starting point. Delete those that won't be needed for your process,

and amend the others as needed. This can be easier than selecting and customising drawing tools "from scratch", especially when you start using the ESPON ACTAREA web app.

When you use a predefined layer type, this will appear in light grey next to the layer name in the list of layers in the process setup interface. However, this information does not appear in the participant's drawing interface.

Numbering layers

The order of layers in the process setup interface (and in the participant drawing interface) corresponds to order in which features are displayed. Features drawn in the first layers of the list appear in front of those drawn in layers at the bottom of the list.

It can therefore be a good idea to number layers in the order in which you want to submit assignments to participants. During the workshop, you can then tell them to start with layer no 1, then move on to layer no 2 etc.

Test your process settings using 'Participants' view'

You can test your process settings by using 'Participants' view'. This functionality is accessible after typing the list of participants. It is very important to make tests before sending invitations – you cannot make any changes to the process afterwards.

Just click on "invite participants", "next step" and then "Participant view mode".

You then exit participant's view by clicking the "exit participant's view" button in the top right corner

Exit Participant's View Mode

3.4.3   Drawing reference content

Reference content includes representations of geographic features that help participants positioning their inputs. Typical examples of reference content are urban nodes, transport axes, administrative borders and rivers.

When you draw reference content, you may use CTRL+V and CTRL+V to copy and paste elements. This for example makes it easier to produce circles representing urban nodes that are exactly of the same size. When you add text, you can also copy and paste the same text, and then edit the copied text. This helps to ensure that all text is formatted in the same way.

For roads and canals, there are predefined tools that help to draw individual segments rapidly (typically, in a workshop situation). However, they are not well-suited to draw a whole network. For this purpose, you should rather use the polyline tool. Draw the entire network in one colour,

and copy and paste it. Select the pasted lines, change their colour and reduce their line width slightly. Then place this second representation of the road network exactly above the initial one. You will then have a system if lines with a thin border in a different colour, which is intuitively recognisable as a road network.

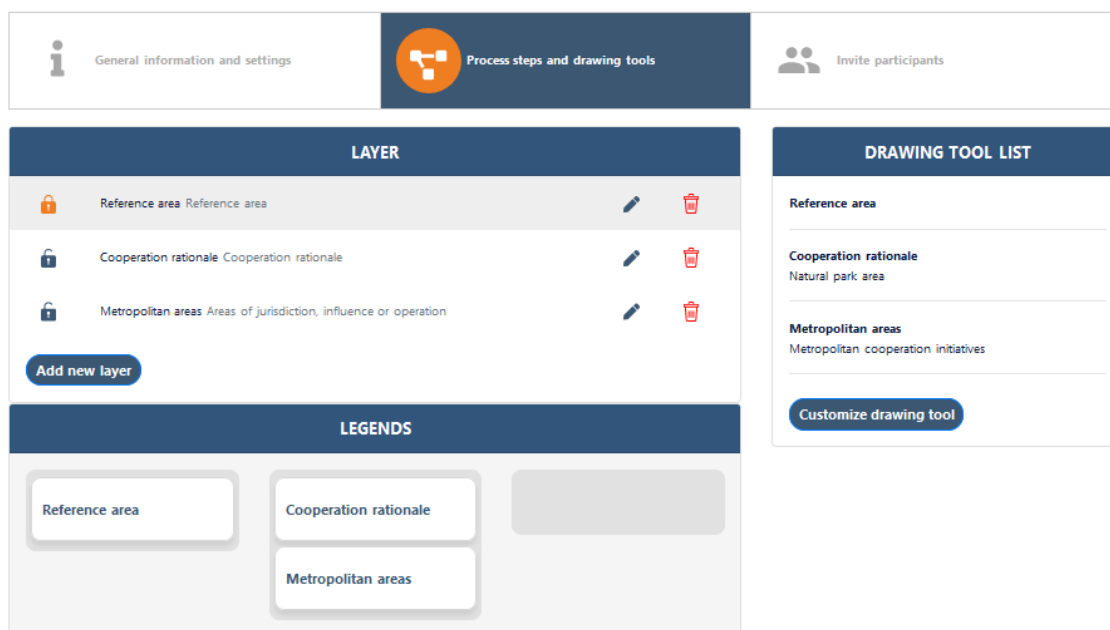## 3.5   Process features – Institutional mappings

Institutional mappings include similar process features to Mapshots:

- Different layers in which drawings shall be produced. Most layers are normally associated with one or more questions submitted to the participants, to which they reply by producing drawings. Some layers only provide reference elements, as described below. Layers are added by clicking the "add new layers" button (see Figure 25). The next steps for adding layers are described in section 3.6)

- A "reference area" within which the institutional map will be drawn. In most cases, this is a grey rectangle with main administrative borders in the territorial cooperation area. This layer is not supposed to be edited by the participants. For each other layer, the facilitator can decide whether participants should be allowed to draw features only within the reference area, or across the entire canvas. This helps to ensure that participant inputs correspond to expectations.

- Other reference content provided by the facilitator. Reference content can serve different purposes:

  o It can position the cooperation area within the reference area, as a starting point for reflection. This will make participant contributions more easily comparable, as the cooperation area will be represented in the same way in all contributions.

  o It can represent a cooperation rationale, e.g. a geographic feature such as a mountain range, lake (see e.g. Figure 4 p. 11), river, border, protected area, transport axis or economic development resource around which cooperation is organised. A dedicated pattern is normally used for this purpose.

- The structuring of the legend. Institutional mapping legends are generated semi-automatically. Each type a new type of geographic feature is drawn by a participant, a corresponding legend item is added. Legends are always organised in three columns, with the elements from each layer grouped together in one bloc. The bottom part of the "process feature" interface (see Figure 25) makes it possible to determine in which column and in which order these legend blocs should be displayed. Unnecessary legend items can be deleted by the participant.

- Drawing tools. The facilitator makes drawing tools available for participants. These drawing tools are selected by clicking the "customise drawing tools" in the left part of the

process features interface (see Figure 25). You can only add drawing tools to layers that have previously been added. The next section provides more details on the notion of "drawing tool".

Figure 25 Interface to define Institutional Mapping process features

3.5.1　　Customising drawing tools

Institutional mapping drawing tools can be:

- Narrowly defined, e.g. "a thin, red and curved line",

- Broadly defined, e.g. "any type, with any fill colour and any contour colour".

A narrowly defined drawing tools (first example) is easier and faster to use by the participant. A broadly defined drawing tool allows for a greater variety of responses.

Institutional Mapping drawing tools are subdivided in the following groups and subgroups (see also Figure 26 below):

- Lines

    o   Straight lines

- Surfaces

    o   Circles

    o   Rectangles with rounded corners

- Points

    o   Geometric symbols: circles, rectangles and triangles

- Arrows

    o   Simple/straight arrows

All these drawing tools can be customised with different fill colours or patterns, stroke widths, stroke colours, stroke types (continuous or dashed). A wide range of options are therefore available, as for Mapshots (see Figure 23 p. 29). However, contrary to Mapshot, no general design settings can be made (see section 3.2). This is because Institutional mappings are produced with a more limited range of fill colours (see Figure 27). Similarly, the range of available contour colours (see Figure 28) and patterns (see Figure 29) is also more limited than for Mapshots.

When customising a drawing tool:

- Tick boxes in front of the subtypes that should be accessible to the participant under this drawing tool;

- Lock the drawing parameter (e.g. colour, stroke thickness) if this should be the only option available to the participant. If you unlock a parameter, this implies that the first option selected is applied by default, but that the participant may also choose other options.

As a general rule:

- only provide the drawing options that will be useful to the participant,

- avoid, to the extent possible, offering "multi-purpose" drawing tools. Each drawing tool should serve a specific purpose.

Figure 26 Overview of Institutional mapping drawing tools
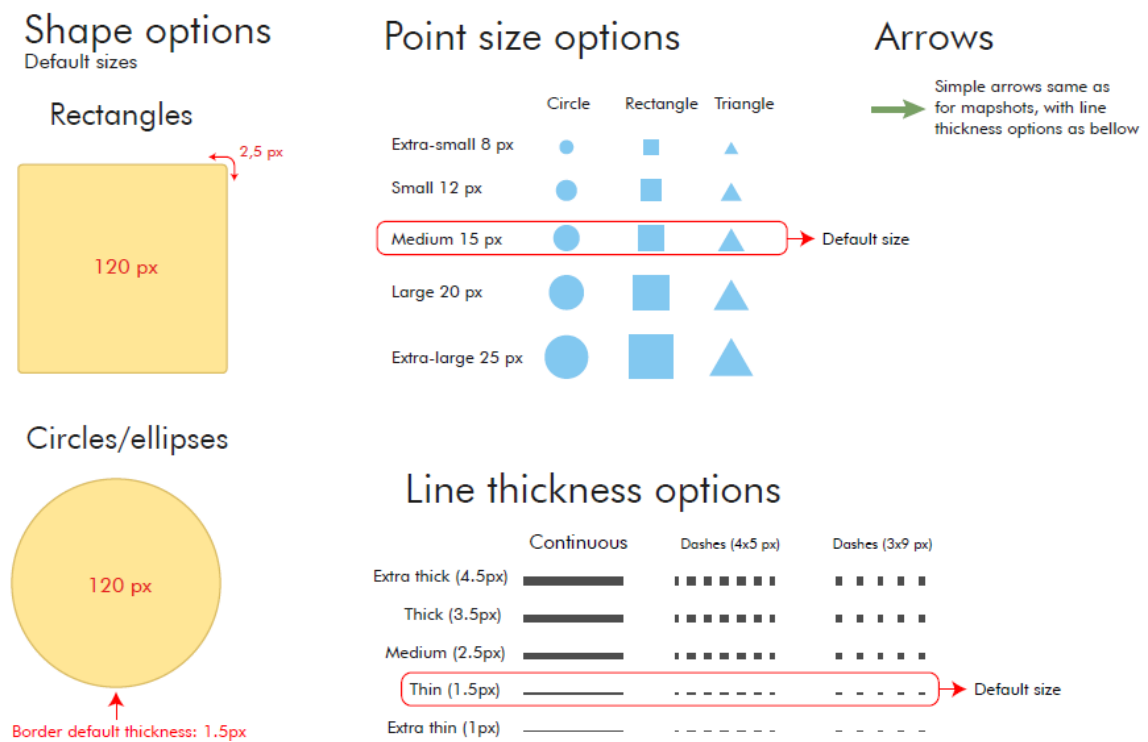
Figure 27 Available fill colours for Institutional Mappings
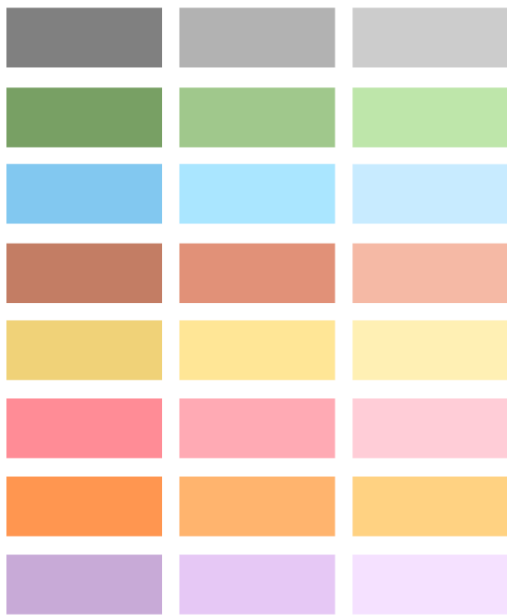
Figure 28 Available line colours for institutional mappings
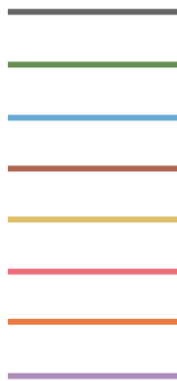
Figure 29 Available patterns for Institutional mappings
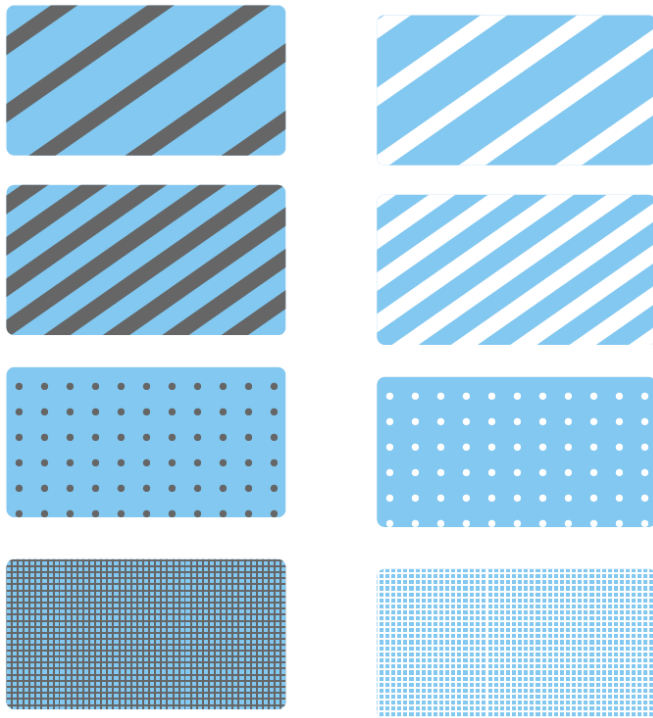
3.5.2   Predefined layers for Institutional mappings

In order to make it easier to navigate among the numerous drawing tool options, the ESPON ACTAREA web app includes 9 predefined layer types:

- Reference area

- Sub-units of reference area

- Borders

- Cooperation rationale

- Areas of jurisdiction, influence or operation

- Positions of place-bound actors

- Networks of place-bound actors

- Relations

Each of these predefined layers include a set of by default drawing tools. As a facilitator, you can use these drawing tools as a starting point. Delete those that won't be needed for your process, and amend the others as needed. This can be easier than selecting and customising drawing tools "from scratch", especially when you start using the ESPON ACTAREA web app.

You can also add a layer without any default drawing tools.

Test your process settings using 'Participants' view'

You can test your process settings by using 'Participants' view'. This functionality is accessible after typing the list of participants. It is very important to make tests before sending invitations – you cannot make any changes to the process afterwards.

Just type the name of a "dummy participant" in the invite participants interface and then "next" of you want to access 'Participants' view' while setting up your process. You can delete this dummy participant later.

You then exit participant's view by clicking the "exit participant's view" button in the top right corner

Exit Participant's View Mode

3.6   Adding layers

Layer information is composed of a limited number of parameters:

- Layer name

- Type of layer (i.e. whether it should be based on one of nine predefined types described in the previous section or not)

- Whether the layer should be locked or unlocked (see below)

- Whether the comment field should be enabled or disables: the comment field for example allows participants to provide explanations linked to the inputs they have provided, and reactions to the question submitted to them by the facilitator. They can be displayed during the last phases of the process, when contributions are compared.

'Locked' and 'Unlocked' layers

When setting up a process, each layer can be 'unlocked' or 'locked'. This determines whether participants will be able to edit and add features in the layer and the very beginning of the process. During the process, the facilitator can 'lock' and 'unlock' layers at any time.

'Locking' and 'unlocking' helps to ensure that:

- Some features remain unchanged;

- All participants are working on the same layers at the same time;

- Participants cease to edit their inputs when the time has come to focus on comparisons and the elaboration of a consensual or synthetic Mapshot.

3.7   Inviting participants

Participants can be invited by typing names, emails and other information directly in the ESPON ACTAREA web app, or by downloading a spreadsheet template, filling in the information in this spreadsheet and uploading it. The second option makes it easier to copy and paste lists of participants from other sources.

> **Use the invite participants functionality wisely!**
>
> The ESPON ACTAREA web app sends out invitations to all listed participants. To recipients of the messages, the facilitator will appear as the sender of invitations.
>
> Make sure to send out invitations only to persons you think will be interested in the participative process, and avoid spamming recipients.

The following fields are available for all processes:

- Last Name

- First Name

- Email address

- Category of participant: This optional field can be used by the facilitator to keep track of the balance between different categories of participants in the group

If the "by group" option has been chosen (see section 3.1), the following fields are available:

- Role of participant: moderator or group member

This implies that moderators need to be designated before one starts with group assignation. Group assignations (i.e. which participant is part of the group of which moderator) are managed outside of the web app.

When the list is finalised, you may send invitations and start the process.

3.8   Invitation mails

The ESPON ACTAREA web app generates invitation mails automatically, as illustrated in Text Box 1. These brief emails include individual links to accept invitations. They are sent from the address actarea@espon eu. However, participants can also accept or decline invitation just by logging in to the ACTAREA web app, as long as they have registered using the same email as

the one you sent invitations to. They your invitation in their list of processes, with buttons to accept or decline it.

> **Carefully check how the process has been set up before sending out invitations**
>
> Once you have sent invitations, you will not be able to modify the configuration of the process. It is therefore essential to review and test your layers and drawing tools in detail before sending out invitations.
>
> You can test your process settings by clicking 'Participants' view'. You then exit participant's view by clicking the "exit participant's view" button in the top right corner
>
> Exit Participant's View Mode

> **Send a personalised mail in parallel to the participants with the automatically generated invitation**
>
> As process facilitator, we encourage you to send a parallel email with more a detailed description of the process, encouraging participants to the invitation. This is particularly

When you send invitations, a table with all invited participants is automatically sent to the contact email for the process you indicated as part of the setup process. This table is particularly useful to keep track of participants who decline the invitation, as their personal information will be deleted from the web app in order to ensure GDPR compliance. (see section 4.1 below)

In the example below, highlighted text corresponds to fields generated on the basis of information provided by the facilitator. In this case, process facilitator Erik Gloersen invites Domonique Quenneville to participate.

New invitation

Dear Dominique Quenneville,

Erik Gloersen would like to invite you to take part in an ACTAREA workshop entitled **Priorités pour la Grande Région / Prioritäten für die Großregion**.

On the ACTAREA web app website, you will find more information about these workshops and the web app functionalities.

We hope you will enjoy using the ACTAREA web app!

The ESPON ACTAREA Web App team We welcome feedback from all users!

Accept invitation

We welcome feedback from all users! Please let us know about your experience.

Please let us know about your experience.

You can ignore invitation mails altogether!

Invitation mails are automatically sent to all participants. This is a way of ensuring that all participants are informed that someone has included their email in a list of of potential participants to an ACTAREA process.

Unfortunately, these mails (1) tend to end up in participants' "spam" (2) are always in English (irrespective of the process language(s) you select).

> However, these emails can be ignored entirely: participants that have created a profile <u>with the same email address</u> as the one you sent the invitation to will find your invitation in their list of processes when they log in. They then just have to click "yes" to participate.
>
> There is therefore no need for your process participants to retrieve the invitations from their spam folder if they can't find it. Just ask them to register as ACTAREA users with the same email address as the one you used to invite them.

The ACTAREA web app determines whether a participant is registered or not when she/he accepts or declines the invitation:

- If the user is not registered and clicks the 'accept invitation link', she or he is forwarded to registration page. Once registration is completed participant status is changed from "invitation sent" to "invitation accepted". The personal information provided by the user replaces personal information in the list of participants initially created by the facilitator.

- If the user is registered and clicks the 'accept invitation link', the personal information provided by participant replaces personal information in the list of participants initially created by the facilitator.

Registered users can accept or decline invitations by clicking on corresponding buttons in their list of processes.

4 Running a process

4.1 Keep track of participants

Once invitations have been sent, you can access the process overview, as illustrated in Figure 30. This overview includes:

- General information on the process

- A list of layers, indicating whether they are locked or not

- A list of participants, with five different statuses:

    o Registered / invitation not sent (i.e. the participant email you have provide as a facilitator is already in the user database)

    o Not registered / invitation not sent (i.e. the participant email you have provide as a facilitator is not in the user database)

    o Registered / invitation sent / invitation accepted

    o Registered / invitation sent / invitation declined

    o Not registered / invitation sent / invitation declined: personal information is deleted. These lines will be blank, except for an identification number which you will also find in the list of invited participants.

Figure 30 The process preview

4.2   Launch and run the workshop

Once invitations are sent, you can access the process overview page (see Figure 31). This page synthesises information about the process. It also includes an overview of process participants and their inputs, with information on:

- Participant name

- Status: registered or not, invitation accepted or decline

- Type of participation: Group moderator, group member (if organisation by group)

- Language

- For each layer, whether the participant (or group) has started producing inputs or not

The list of participants can be exported in spreadsheet format, e.g. to send reminders to mail recipients who have not responded, or to produce statistics on levels of participation.

Figure 31 Process status

The button at the bottom of the Process status interface makes it possible to access the Process Overview (see Figure 32). This page makes it possible to:

- Observe the progress of the different participants or groups almost in real time. You can:

  o   select the participants or groups to be displayed, clicking on the 👁 icon in the list of participants (bottom left) to make them appear or disappear. Activated profiles appear to the right

o Control the layers to be displayed, by clicking on 👁 icon in the list of layers (top left). This only affects the display of layers in the process overview (i.e. it has not impact on the layers shown to the participants).

- Control which layers should be editable or not (i.e. unlocked or locked) for the participants by clicking any of the lock icons (🔒 or 🔓) in the list of layers (top left). This opens the "Lock and Unlock layers" interface in a pop-up window, which allows you to change the selection of layers which should be editable by the participants or not. This functionality is useful in a workshop situation, when you want participants to finalise one step, and move on to the next. The change is not immediate for the participants (see explanations on "time management" below). Within a maximum of 60 seconds, a countdown clock is displayed in the top left corner of the drawing interfaces of all participants (see

-

- Figure 34). This countdown is synchronised on all logged-in computers.
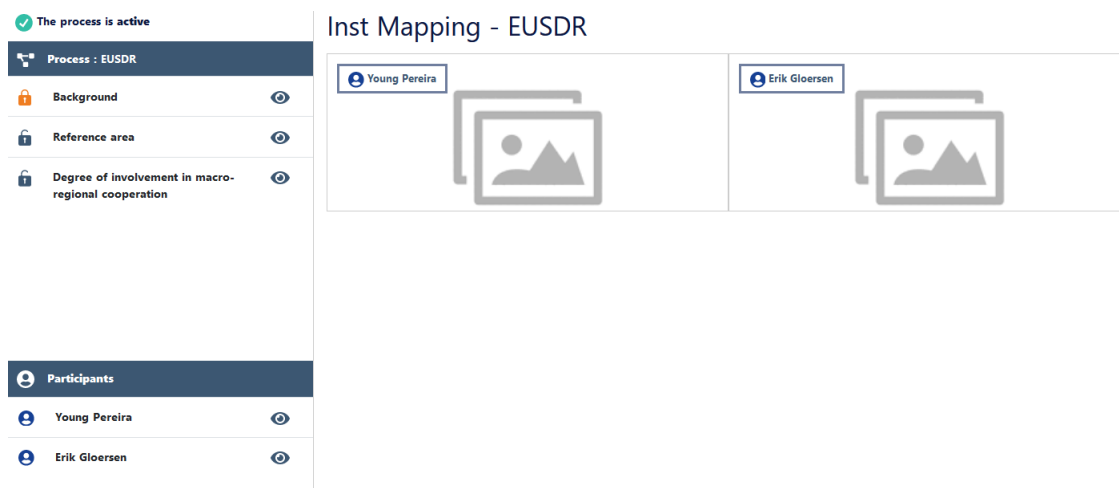
Figure 32 Process overview interface

Figure 33 Locking and unlocking layers

Figure 34 Countdown after change of locked/unlocked layers

> **ⓘ Time management**
>
> To avoid over-burdening the ESPON server, the ACTAREA web app only communicates with the server every 60 seconds. As a result, it can take up to 120 seconds between the time when you lock/unlock a layer, and the time when this information reaches the ACTAREA web app on individual participants or groups' computers.
>
> In order to ensure that changes are applied at the same time, the web app notes the time at which the instruction is given by the facilitator, and applies it with a fixed delay to all participants and groups. This fixed delay can be 2, 5 or 10 minutes.

> **Interacting with participants and groups**
> **in real time during virtual workshop**
>
> To avoid overburdening the server, features drawn by participants will only appears in the process overview when they save them. It is therefore very important to remind participants to save regularly. This also helps to ensure that no inputs are lost.
>
> If you want to interact in real time with a specific participant or group, we encourage you to use the share screen functionality of videoconferencing tools such as Zoom or Teams. In Zoom, you can circulate between virtual break-out rooms of groups to see their shared screen and dialogue with group members.
>
> The process overview window can help you to identify groups or participants which may need particular attention or guidance during the workshop.

4.3 Options and tools available to participants when producing inputs

Individual participants and group moderators have options and tools at their disposal when producing inputs:

- They can use the drawing tools customised by the facilitator to complete each assignment.

- They can change the level of opacity/transparency of individual features or groups of features.

- They can change interface and process languages.

- They can switch between "normal drawing mode" and "sketch mode", to test alternative options without fear of ruining previously drawn features. This option is particularly useful during group work.

- They can switch between normal view and full screen view of drawing canvas.

- They can add comments. Each comments can be associated to a pin placed on the drawing canvas.

- They can hide or show the legend.

- They can edit legend names and remove legend items.

Each of options and tools are described in greater detail below.

Figure 35 Drawing interface for participant
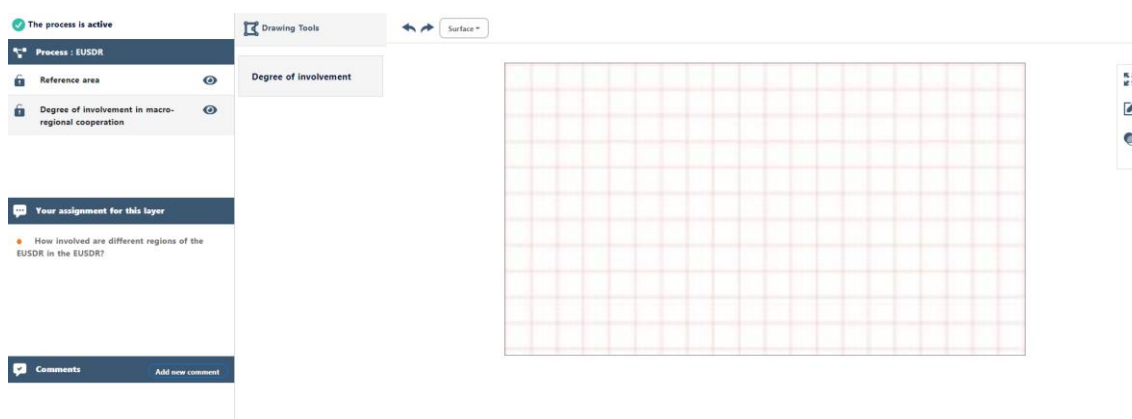
Using drawing tools customised by the workshop facilitator

The participant clicks on one of the unlocked layers in the top left panel. This triggers the following changes in the drawing interface:

- The corresponding assignment appears in the middle left panel.

- The drawing tools that have been selected and customised by the facilitator to complete this assignment are listed to the left of the drawing canvas.

- Available options for each drawing tool are displayed above the canvas

**Change the level of opacity/transparency of individual features or groups of features**

Drawn features can be selected by right-clicking on them. Pressing "shift" makes it possible to select multiple features. Once features have been selected, levels of opacity/transparency can be changed by clicking on the ⬤ icon in the tools window at the right end of the screen.

Change process and interface language

By default, each participant will view the interface in the language she or he has selected as preferred language when registering, and the process in the language assigned by facilitator.

Participants can change the interface language and process language at any time (see Figure 36): top right for interface language (in wep app top banner), left for process language (above list of layers, assignment and comment fields).

Figure 36 Changing interface language and process language
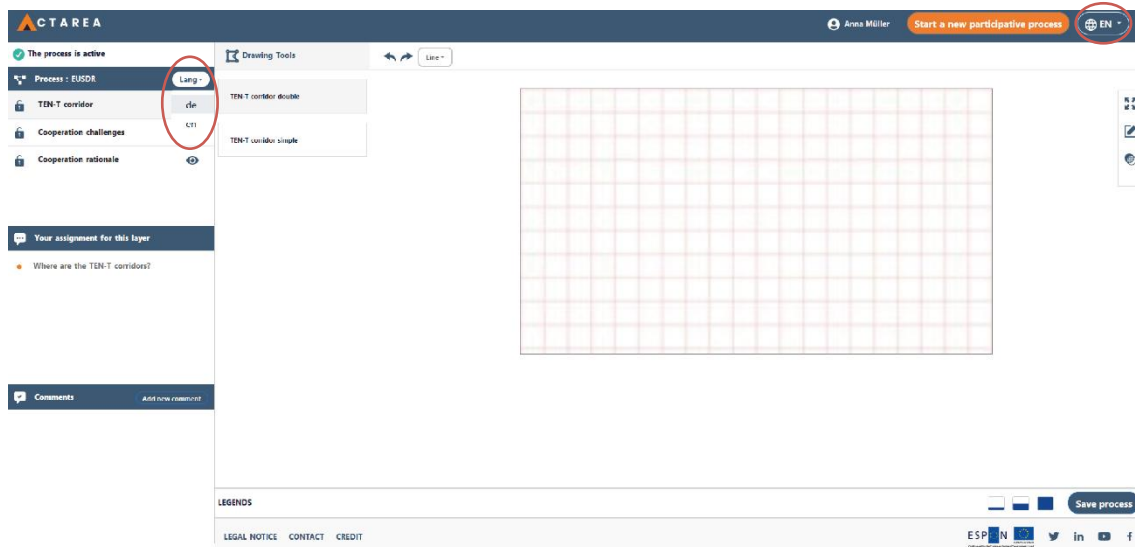
Switch between "normal drawing mode" and "sketch mode"

The ✎ button to access sketch mode can be found in the tools window at the right end of the screen

When activated, sketch mode makes it possible to test alternative options without fear of ruining previously drawn features. This option is particularly useful during group work. When activated, two options appear in the top left corner of the drawing canvas:

If the participant clicks "exit sketch mode", all changes made in sketch mode disappear from the canvas. Corresponding legend items are also deleted.

If the participant clicks "save changes", changes made in sketch mode are included in the Mapshot. Individual features can be edited or deleted if needed.

Switch between normal view and full screen view
Zoom in and zoom out

The ⛶ button to access full screen mode can be found in the tools window at the right end of the screen.

In full screen mode, the left panel with the layer list, description of assignments and comments is hidden. This makes possible to focus on the completion of a given assignment, with a larger view of the drawing canvas. You can show or hide the legend in full screen.

> **Change zoom level within canvas**
> **& optimise the display of the canvas**
>
> Position the mouse pointer within the drawing canvas, press Control (CTRL) (PC) or Command (Mac) and push your mouse wheel forward to zoom-in on a specific feature. Just pull the mouse wheel backward to zoom out.
>
> If you do the same thing while the mouse pointer is outside the drawing canvas, you change the size of the display of the drawing canvas.
>
> This may sound a bit complicated, but just give it a try and you will get the hang of it in no time.

Adding pins and comments

A left click on the drawing canvas adds a pin and opens the commenting interface. The participant can write a comment, and validate it by pressing "send comment". If the commenting interface is closed without clicking "send comment", the pin and comment are deleted.

Figure 37 Commenting interface displayed when adding a pin

Add new comment   ×

Layer: cities

This town has experienced intensive growth in recent years

Send comment

Comments are displayed in the comment panel to the left. The pin becomes visible when clicking on any comment.

Comments can also be added in the comment panel. In this case, comments are not associated to a pin.

Hide or show the legend

The three ▭ ▬ ■ buttons and to the bottom left of the drawing canvas respectively make it possible to hide the legend, show the legend below the drawing canvas and show the legend only (i.e. hide the drawing canvas)

**Remove and edit legend entries**

Legend items are added automatically as the participant draws features with new parameters (e.g. a surface with a new fill colour, a line with an alternative width). If the participant deletes these features, she or he will have to remove corresponding legend entries manually.

Clicking on the ✏ icon next to a legend entry opens the interface for legend entry editing or removal.

4.4   Synthesis and consensus-building

The synthesis and consensus building interface is accessible to the facilitator only from the process overview (see Figure 38). In a workshop situation, the facilitator is expected to share this screen with participants by using a beamer (in a face-to-face workshop) or the share screen functionality (in a virtual workshop). The consensus building functionality can also be used to process and synthesise participants inputs individually after a workshop.

Figure 38 Accessing the consensus-building interface
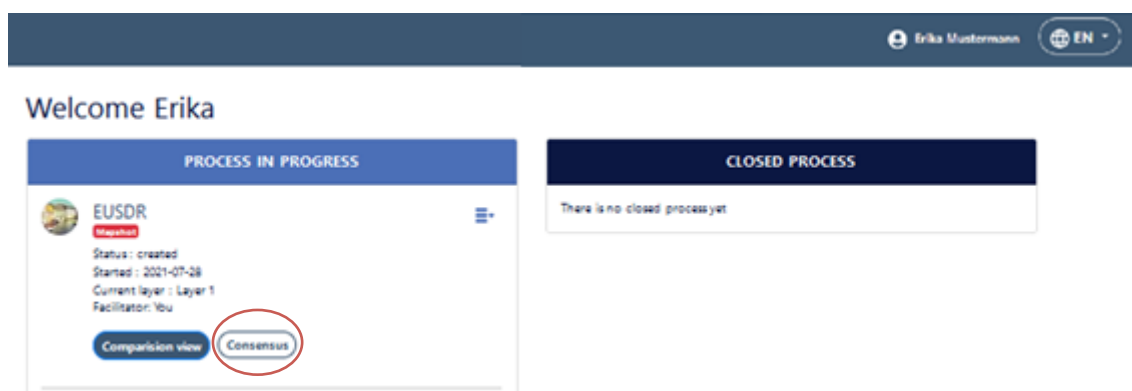
In the synthesis or consensus-building step, contributions from different participants can be imported, edited and combined. As facilitator, you can also produce new drawings, using the drawing tools available to participants, as well as some additional ones that are particularly useful in the facilitation process: a text placement tool, a broad brush and arrows. These additional "facilitator drawing tools" are available in the tools window at the right end of the screen (see

Figure 39).

Figure 39 Consensus-building interface
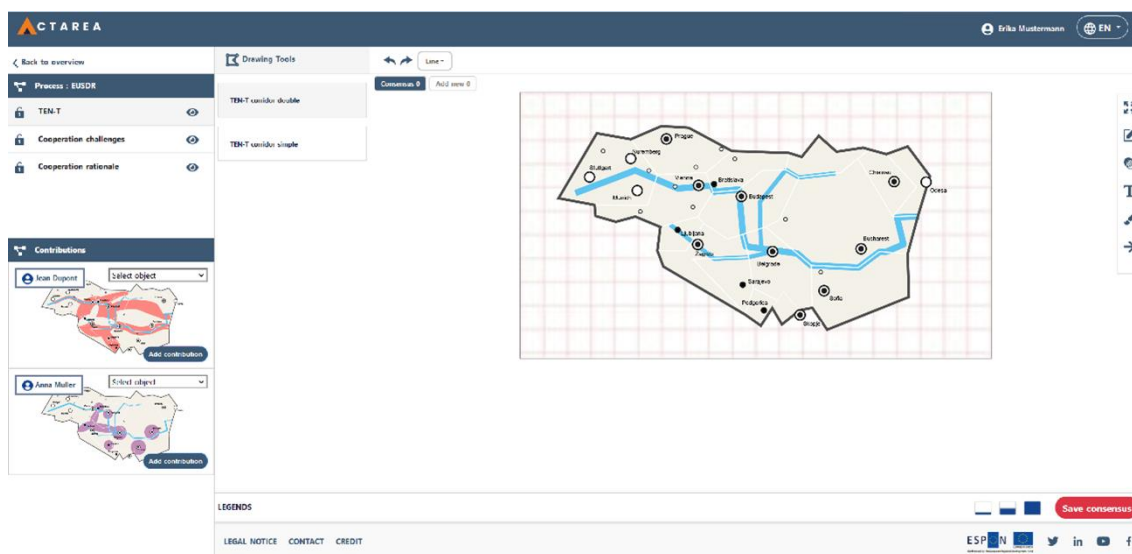
As a facilitator, you can select the layers to be edited by clicking on the layer name in the top right panel. You can also select layers to be displayed and hidden by clicking on the "eye" icon on each row.

> 💡 **Unlock relevant layers**
> **before you start with consensus-building or synthesis**
>
> Locking and unlocking your layers is only possible from the Process overview window (see Figure 32 p. 45). At the end of the "input collection" step, inform the participants that they should stop providing inputs. Then, before you start with the consensus-building, unlock all relevant layers (normally, all layers except those with reference content).
>
> It is theoretically possible for participants to modify their inputs during the consensus building step.

In the bottom left panel, you can first select which participant contributions should be displayed. Then, the dropdown menu allows you to select individual layer in each contribution and add them to consensus or synthesis representation. Individual graphic elements that have been added can then be deleted or edited if needed. As mentioned above, you can also draw new elements, using the same drawing tools as the participants or the additional "facilitator drawing tools".

The legend is generated semi-automatically during the consensus-building step in the same way as when participant inputs are produced (see section 4.3).

5 Exporting process inputs and results and closing a process

Participant inputs and synthesis/consensus solutions can be exported as shown in Figures 40 and 41 below. These pages are designed to be displayed on top of each other, with the Mapshot/Institutional mapping at the bottom of the first pages, and the legend at the top of the second page. Participant names appear in the header of each pages. Exports are only available in pdf format.

Figure 40 Layout of pdf export of project overview, consensus solution and participant contributions

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LEGENDS

Territoire de la Grande Région	1.1 Pôles urbains	2.1 Le marché du travail
Villes et frontières	1.2 Polarisation urbaine	2.2 La consommation
	1.3 Identification des pôles urbains structurants pour la Grande Région	2.3 Les services d'intérêt général
	1.4a Axes prioritaires	2.4 La protection des espaces naturels et préservation des ressources naturelles
	Legend name	
	1.4b Goulets d'étranglement	3

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Contribution 567

PARTICIPANT

Name	E-mail	Group Responsibility
Cécile COT	cecile.cot@agroparistech.fr	None

20