How a policy analyst uses the Argument Reconstruction tool:

Let us assume that the policy consultation has been set up and is organised by a team from the policy analyst's governmental organisation. His / her role in the process is to identify and formalise arguments that have been brought forward in the Green Paper or that have been generated in the course of the debate so that these can be visualised by the IMPACT tools and help the participants form their opinion. From this point of view, he / she is likely to use the Argument Reconstruction tool, the only tool specifically designed for expert policy analysts. He / she might also use the other tools, especially the Argument Visualisation tool, to check the effects of his / her work from the perspective of participants.

At the start of the consultation, only the Green Paper will be available as source material for arguments. The policy analyst may also consult other documents from the policy discussions that have led to the formulation of the Green Paper, or he / she may research online conversations such as weblogs and online forums to find new arguments related to the copyright policy debate.

Fig. 1: Policy Analyst

Once the policy analyst has found an interesting argument not yet represented in the database of the consultation, he / she starts the Argument Reconstruction tool to formalise it for inclusion in the database. Let us assume the consultation has already started and a librarian representing LIBER, the Association of European Research Libraries, has sent some responses to the questions formulated in the Green Paper. The policy analyst is interested in LIBER's response to question 9 of the Green Paper about the scanning of works held in libraries.

➔ *Click on 'Start now!' in the 'Argument Reconstruction' box on the start screen of the IMPACT toolbox to start the Argument Reconstruction tool.*

On the first screen, the policy analyst can see a list of documents already available in the database. The LIBER response is not yet available, so he / she decides to add it to the database for future reference.

➔ *Click on the 'Add new document'-button to enter information about the new policy document sent by LIBER.*

The LIBER document is available online at https://circabc.europa.eu/sd/d/84235a12-f544-48e4-9a95-7b75565337aa/liber_ligue_des_bibliothtques_europuennes_de_recherche.pdf. The policy analyst enters the title, the URL and the following passage from the LIBER document in the text boxes:

'Question 9.   Should the law be clarified with respect to whether the scanning of works held in libraries for the purpose of making their content searchable on the Internet goes beyond the scope of current exceptions to copyright?
Yes.
Not all the material digitised by publishers is scanned with OCR (Optical Character Recognition) with the purpose of making the resulting content searchable. If the rights holders will not do this, libraries should be able to offer this service. It would have a transformative effect on research, learning and teaching by opening up a mass of content to users which can be searched using search engines. The interests of copyright

holders will not be harmed, because the resulting output will act as marketing material for their materials.'

➔ *Click on the 'Save'-button to save the information to the database.*

To add the argument to the database, the policy analyst has to annotate the text from the document, that is, to code the argument in an appropriate form.

➔ *Click on the 'Annotate'-tab on the left side of the screen to open the dialogue for coding arguments.*

Fortunately, the policy analysts' colleagues have already set up all the questions from the Green Paper as 'issues' to be used in the annotation. The policy analyst scrolls down the list and chooses question nine about the scanning of works held in libraries by clicking on it. No arguments have been entered yet.

➔ *Click on the 'Add new argument'-button on the left side of the screen to add a new argument to the database. The document is still displayed on the right side of the screen.*

On the left side of the screen, a drop-down list has appeared, asking the policy analyst to 'Select a scheme'. The list offers currently five different argumentation schemes (see the Background section above for a general introduction): 'Credible Source', 'Practical Reasoning', 'Value Recognition', 'Value Credible Source', and a general argument scheme (more schemes are to be added in the near future). Based on his expert knowledge in policy argumentation, the policy analyst chooses the 'Practical Reasoning Argument Scheme' as appropriate for the argument from the LIBER response to question nine.

➔ *Choose 'Practical Reasoning Argument Scheme' from the drop-down list on top of the left side of the screen.*

Now the analyst sees on the right side of the screen the document with LIBER's response to question nine, which contains the argument he / she wants to add to the IMPACT database. On the left side of the screen, he / she sees five text boxes. These text boxes indicate the slots of the argumentation scheme that have to be filled to fully represent an argument of this particular scheme, here, the Practical Reasoning scheme with the slots for specifying an action, an agent, one or more circumstances, one or more consequences, and one or more values. To code the argument, the policy analyst has to apply state-of-the art argumentation analysis techniques that cannot be elaborated here. However, the tool supports the analyst in his work (see below). Note that it is not necessary to fill all the slots (i.e., the text boxes), arguments can also be coded by entering just some of the premises (e.g., to be completed later).

➔ *To copy a passage from the original document shown on the right side into a slot of the argument on the left side, select the passage by dragging the mouse over it, and then click on the 'Paste' button below the text box where the passage should be entered. The tool will automatically copy the passage into that text box. It will also add a link to the original document for future reference, marked by the line 'Quote'. If there is nothing displayed between the quotation marks behind 'Quote', nothing is being quoted. You can also enter or manipulate the text in the text box manually. If you do so while something is quoted, both the origi-*

nal quote is saved as well as the new text you enter. This enables the policy analyst to rewrite text that is not very well readable when quoted literally.

➔ *In case you want to enter more than one circumstance, consequence or value, click on the '+' button above the respective text box and an additional box will open up. Clicking on the '-' button will let the respective text box disappear again. To delete the link to the source document for any text box, click the 'Unlink' button and it will disappear.*

➔ *Suggestion: To code the argument from the LIBER response to question nine, use the following statements. This may also give you an idea how the formalising of an argument from the free text of policy proposals into the formal structure of an argumentation scheme can work:*

      action: Clarify the law and exceptions to allow libraries to scan material.

      agent: The legislators.

      circumstance 1: Some material held by publishers is not scanned, so it cannot be searched for.

      circumstance 2: Some material held by publishers is not scanned, so it cannot be used for marketing.

      circumstance 3: There is no exception to allow libraries to scan materials without seeking a copyright holder's permission.

      consequence 1: All material held by publishers is scanned, so it can be searched for.

      consequence 2: All material held by publishers is scanned, so it can be used for marketing.

      consequence 3: Libraries are allowed to scan materials without seeking a copyright holders' permission.

      values: Research, learning, and teaching are promoted, as well as publishers' profits and legal clarity.

➔ *Finally, to save the argument to the database once you're finished, click the 'Save button' at the bottom of the left side of the screen. A note will appear stating that the argument has been saved (please be patient as it might take some time).*

➔ *Please feel free to explore the other functions of the Argument Reconstruction tool. You can add new documents, modify existing arguments or add issues. Use the tabs on the top of the screen and the 'Back' button displayed in the upper left corner of the tool's screen to navigate. The small blue circles with an 'i' in them indicate that a help text is available for the respective context – click on them and a text box with helpful information will appear.*

To check whether his / her changes to the database have been successful and to view the results from the perspective of the participants in the consultation, the policy analyst opens the Argument Visualisation tool to see the new map of arguments for the issue of question nine.

➔ *See the description of the Argument Visualisation tool above and follow the steps until you get to the map of arguments for question nine. You should be able to see the argument you have entered with the help of the Argument Reconstruction tool.*

The Policy Modelling tool and the Structured Consultation tool do not offer any specific functionality for the policy analyst. However, he / she might use the Argument Visualisation tool to get a summary of the responses to the Structured Consultation questions about question nine (see above the instructions at the end of the section on the Structured Consultation tool). You might also want to consult the sections on how the librarian uses the IMPACT tools for a description of other functions.

➔ *Thank you for using the IMPACT toolbox! Please don't forget to take the online survey at* *http://ofb.zebralog.de/policy-argumentation/*