GENERALIZED NET MODEL OF PROCESS OF THE EUROPEAN AWARENESS SCENARIO WORKSHOP METHOD

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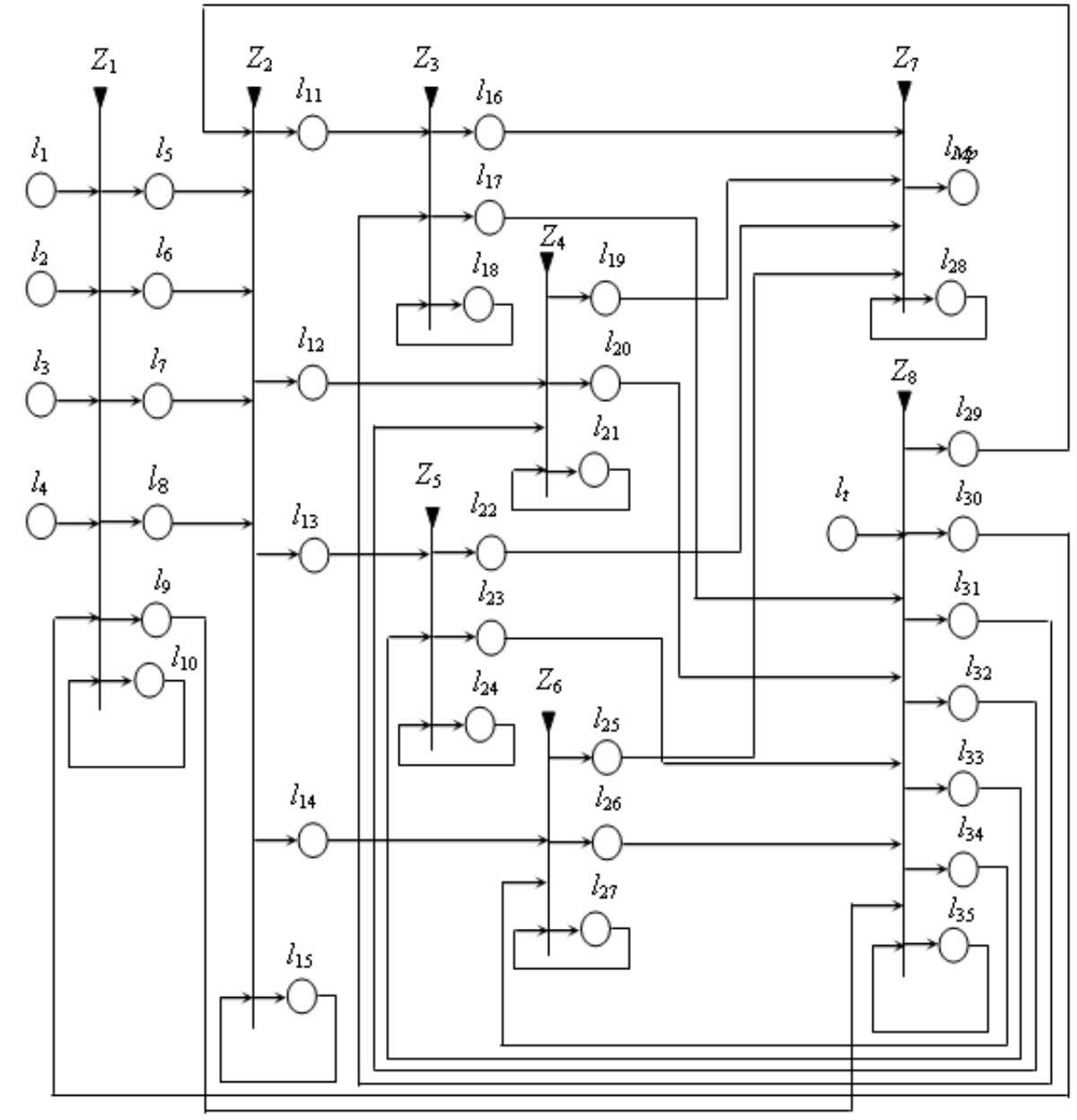
European Awareness Scenario Workshop Method

- The European Awareness Scenario Workshop (EASW) Method allows the direct participation of social groups from civil society. The setting of a EASW offers the participants a direct opportunity for exchanging and discussing their points of view, doubts, suggestions and wishes regarding a particular topic or problem with experts and decision-makers. Furthermore it is a tool for promoting dialogue, furthering involvement and for managing a constructive discussion between various actor groups.

European Awareness Scenario Workshop Method

- **Step 1:** Creating a Scenario on the Focus Question;
- **Step 2:** Identification of common Themes derived from the groups´ Scenarios;
- **Step 3:** Thematic Groups;
- **Step 4:** Masterplan.

GN model of process of the EASW Method



Initially the following tokens enter in the GN:
in place l_1 -a_1 - token with characteristic:
$x_0^{a_1}$ = “Citizen 1, Citizen 2, Citizen 3, Citizen 4”;

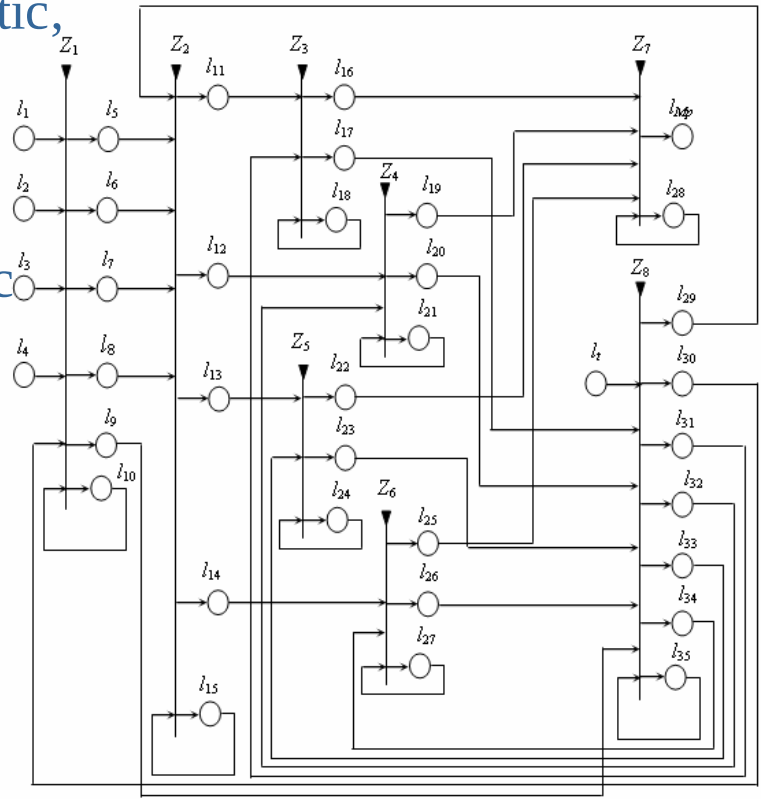
in place l_2 - a_2 - token with characteristic,
$x_0^{a_2}$ = “Expert 1, Expert 2, Expert 3, Expert 4”;

in place l_3 - a_3 - token with characteristic,
$x_0^{a_3}$ = “Fireman 1, Fireman 2, Fireman 3, Fireman 4”;

in place l_4 - a_4 - token with characteristic,
$x_0^{a_4}$ = “Participant 1, Participant 2,
Participant 3, Participant 4”;

in place l_t - b_t’-token with characteristic
$x_0^{b_t'}$ = “common topics and themes”.

Also initially there is a a_M-token
in place l_{35} with characteristic
$x_0^{a_M}$ = “Moderator”.



$?= \{Z_1, Z_2, Z_3, Z_4, Z_5, Z_6, Z_7, Z_8\},$

where the following transitions represent:

Z_1 – The activity of the role groups;

Z_2 – Forming of the thematic groups ;

Z_3 – The work of the thematic group 1;

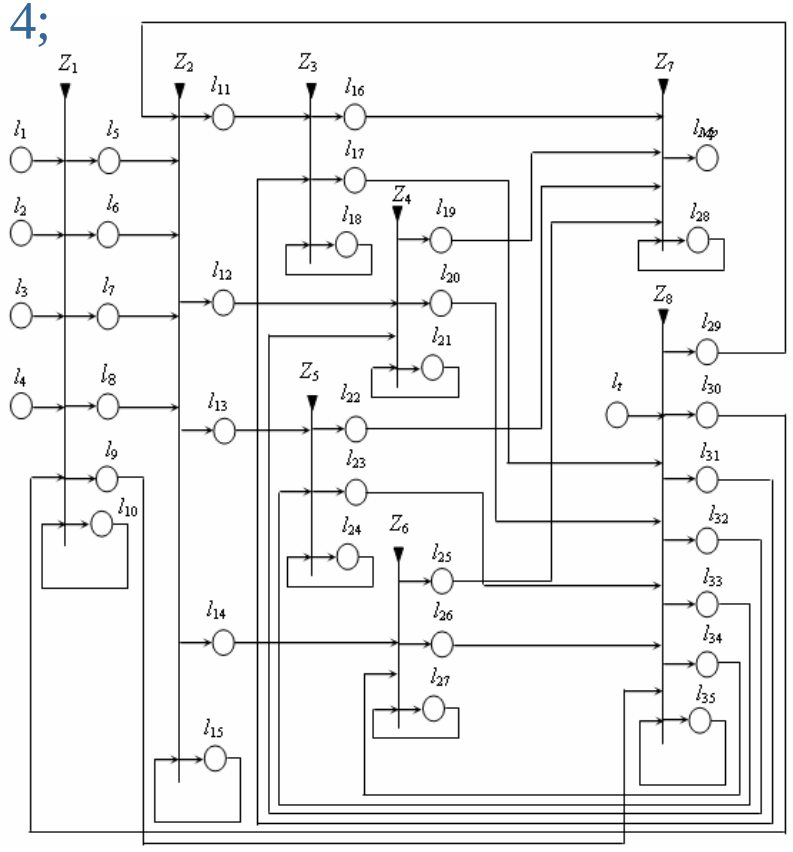
Z_4 – The work of the thematic group 2;

Z_5 – The work of the thematic group 3;

Z_6 – The work of the thematic group 4;

Z_7 – Creation of the Masterplan;

Z_8 – The work of the moderator.



$$Z_1 = <\{l_1, l_2, l_3, l_4, l_{10}, l_{30}\}, \{l_5, l_6, l_7, l_8, l_9, l_{10}\}, r_1, \vee(\wedge(l_1, l_2, l_3, l_4, l_{30}), l_{10})>$$

The a_1, a_2, a_3 and a_4 tokens from places l_1, l_2, l_3 and l_4 respectively enter place l_{10} and do not obtain new characteristics. They generate new b_k-token that enter place l_9 with characteristic

$x_0^{b_k}$ = “Common topics and themes, the list of the key words”.

The α_1, α_2, α_3 and α_4-tokens from place l_{10}, that enter places l_5, l_6, l_7 and l_8 do not obtain new characteristics.

$$Z_2 = <\{l_5, l_6, l_7, l_8, l_{15}, l_{29}\}, \{l_{11}, l_{12}, l_{13}, l_{14}, l_{15}\}, r_2, \vee(\wedge(l_5, l_6, l_7, l_8, l_{29}), l_{15})>$$

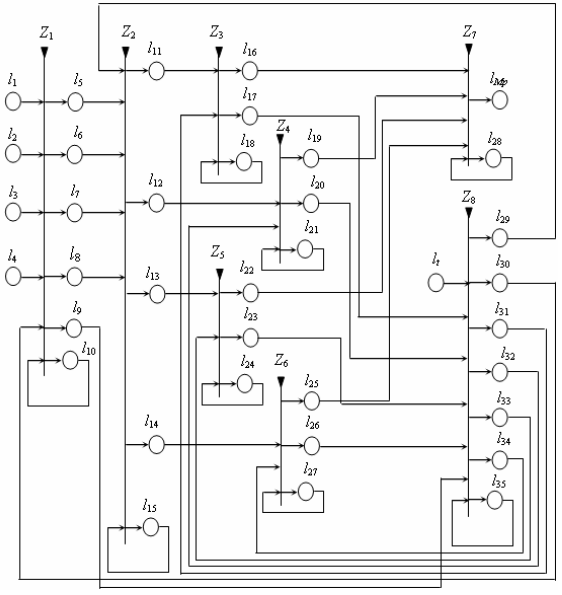
The a_{11}, a_{12}, a_{13} and a_{14} tokens enter places l_{11}, l_{12}, l_{13} and l_{14} with characteristics respectively:

$$x_0^{a_{11}} = '' \, pr_1 x_0^{a_1}, pr_1 x_0^{a_2}, pr_1 x_0^{a_3}, pr_1 x_0^{a_4}, x_0^{b_t''} ''$$

$$x_0^{a_{12}} = '' \, pr_2 x_0^{a_1}, pr_2 x_0^{a_2}, pr_2 x_0^{a_3}, pr_2 x_0^{a_4}, x_0^{b_t''} ''$$

$$x_0^{a_{13}} = '' \, pr_3 x_0^{a_1}, pr_3 x_0^{a_2}, pr_3 x_0^{a_3}, pr_3 x_0^{a_4}, x_0^{b_t''}$$

$$x_0^{a_{14}} = '' \, pr_4 x_0^{a_1}, pr_4 x_0^{a_2}, pr_4 x_0^{a_3}, pr_4 x_0^{a_4}, x_0^{b_t''} ''$$



$Z_3 = <\{ l_{11}, l_{31}, l_{18}\}, \{ l_{16}, l_{17}, l_{18}\}, r_3, \vee (l_{11}, l_{31}, l_{12})>.$

The a_{11} token from places l_{11} that enter place l_{18} do not obtain new characteristic. It generates two b-tokens (b_{16} and b_{17}) with characteristic "Suggestions from group 1".

$Z_4 = <\{ l_{12}, l_{32}, l_{21}\}, \{ l_{19}, l_{20}, l_{21}\}, r_4, \vee (l_{12}, l_{32}, l_{21})>$

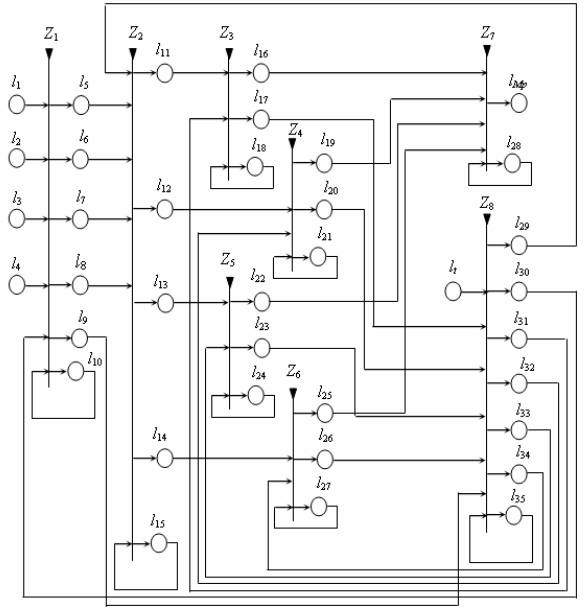
The a_{12} token from places l_{12} that enter place l_{21} do not obtain new characteristic. It generates two b-tokens (b_{19} and b_{20}) with characteristic "Suggestions from group 2".

$Z_5 = <\{ l_{13}, l_{33}, l_{24}\}, \{ l_{22}, l_{23}, l_{24}\}, r_5, \vee (l_{13}, l_{33}, l_{24})>$

The a_{13} token from places l_{13} that enter place l_{24} do not obtain new characteristic. It generates two b-tokens (b_{22} and b_{23}) with characteristic "Suggestions from group 3".

$Z_6 = <\{ l_{14}, l_{34}, l_{27}\}, \{ l_{25}, l_{26}, l_{27}\}, r_6, \vee (l_{14}, l_{34}, l_{27})>$

The a_{14} token from places l_{14} that enter place l_{27} do not obtain new characteristic. It generates two b-tokens (b_{25} and b_{26}) with characteristic "Suggestions from group 4".



$Z_7 = <\{l_{16}, l_{19}, l_{22}, l_{25}, l_{29}\}, \{l_{Mp}, l_{28}\}, r_7, \vee (l_{16}, l_{19}, l_{22}, l_{25}, l_{29})>$

The b tokens from places l_{16}, l_{19}, l_{22} and l_{25} that enter place l_{28} generate b_{Mp} -token that enters place l_{Mp} with characteristic "Masterplan".

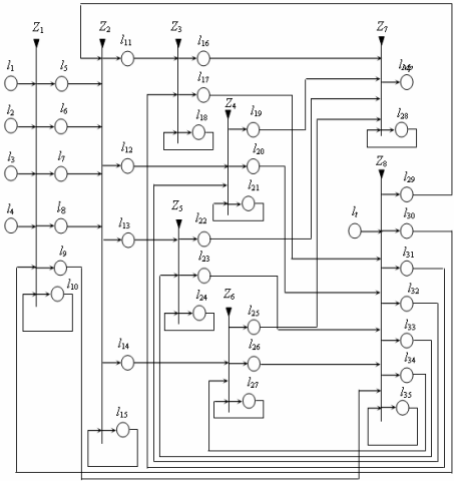
$Z_8 = <\{ l_t , l_9 , l_{17}, l_{20}, l_{23}, l_{26}, l_{35}\}, \{l_{29}, l_{30}, l_{31}, l_{32}, l_{33}, l_{34}, l_{35}\}, r_8, \vee (l_t, l_{17}, l_{20}, l_{23}, l_{26}, l_{35})>$

The b_t'-token from place l_t splits into two b-tokens (b_{30} and b_{35}) They enter places b_{30} and b_{35} and do not obtain new characteristics.

The b_t"-token that enters place l_{29} obtains characteristic $x_0^{b''_t}$ = "The list of four and themes for the thematic groups".

The b-tokens that enter places l_{31}, l_{32}, l_{33} and l_{34} obtain characteristics respectively:

"group 1, end of session";
"group 2, end of session";
"group 3, end of session";
"group 4, end of session".



Conclusion

The GN-model constructed in this way is the initial one in a series of research exercises which the authors are currently preparing.

- It can be used for:
  - Simulation and monitoring of the EASW Method;
  - Management of the EASW Method;
  - Optimization of the work of the EASW Method;
- The next steps are:
  - The suggestions for a creation of the masterplan from thematic groups can be evaluated by means of intuitionistic fuzzy estimations [3];
  - Development of the thesaurus with keywords;
  - Realization of the area for discussions between participants in different groups via Internet.

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Thank you for your attention!