

Are "Design Networks" shaped by their own outcomes? Coordination processes between actors and artefacts

Francesco Bolici, Francesco Virili

- OrgLab -

**Dipartimento Impresa Ambiente e Management,
Università degli Studi di Cassino**

francesco.bolici@eco.unicas.it francesco.virili@eco.unicas.it

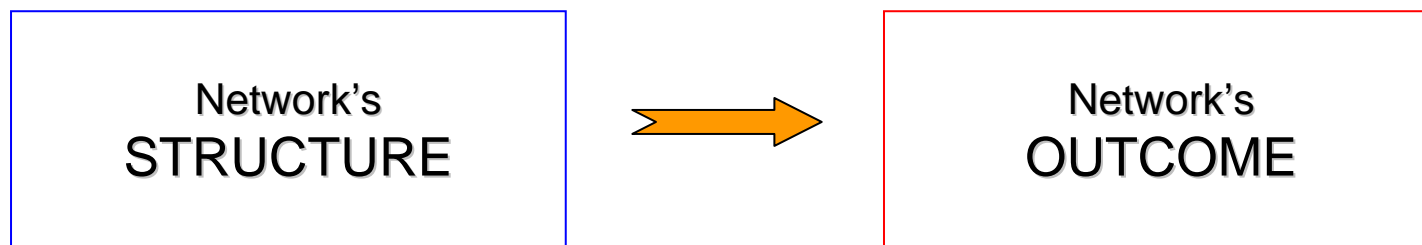
Design Networks are social networks that exist in order to design an artefact

DN main characteristics:

- *temporary*
- *(often) ICT mediated*
- *innovative and creative (knowledge intensive)*
- *(often) flat hierarchical structure (P2P)*

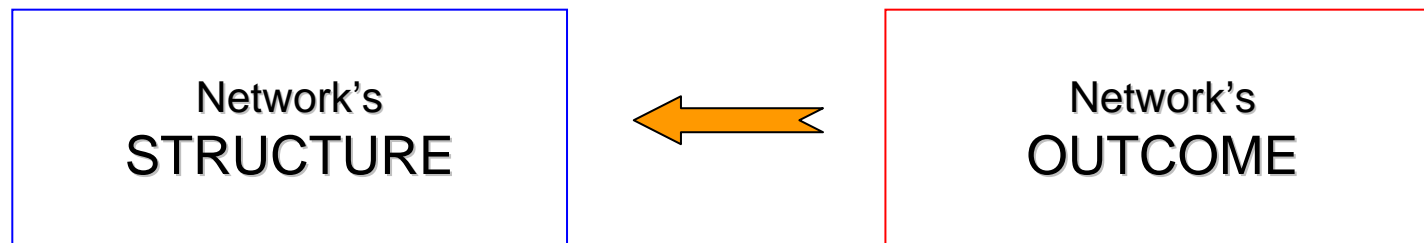
What do we know about Design Networks?

- **how the characteristics of the social network may influence the organizational and economic outcomes**

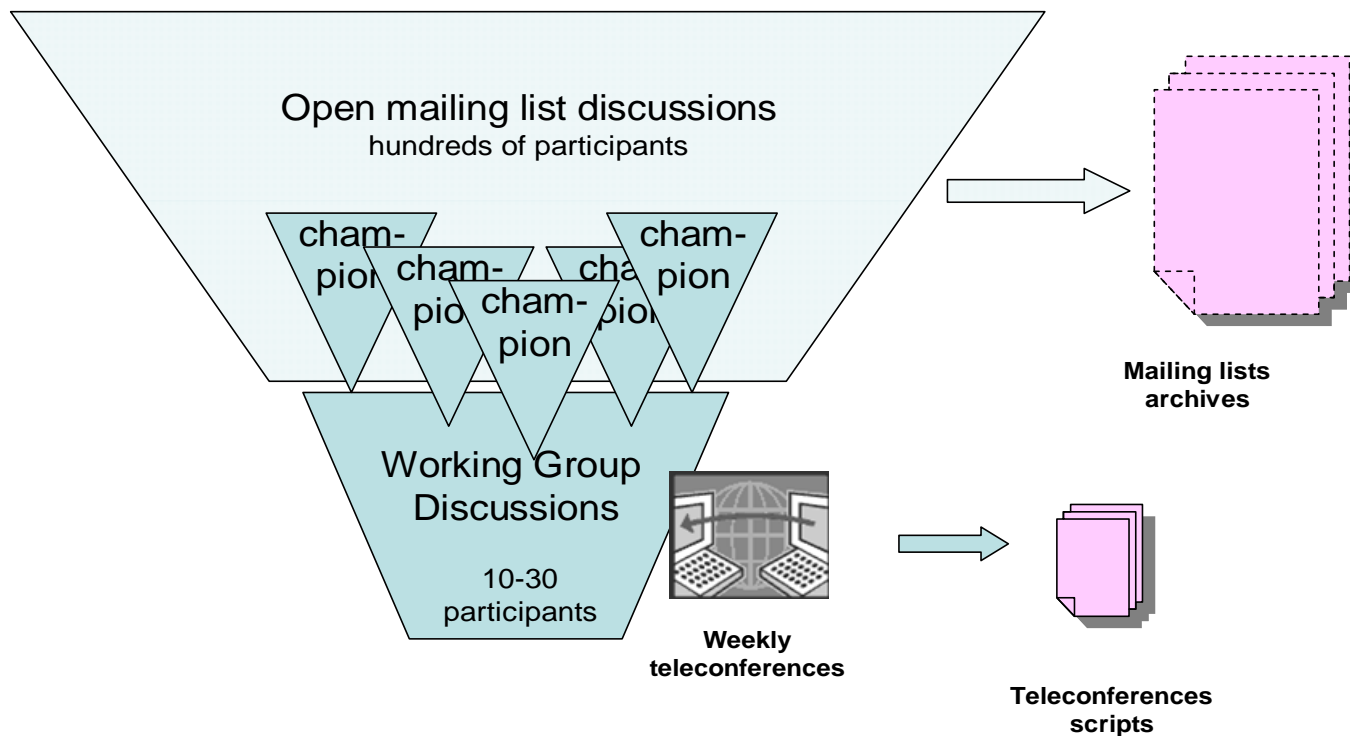


What can we learn from *Design Networks*?

- **RQ:**
 - does the desired outcome of a DN (i.e. the artefact) influence the genesis and the structural characteristics of the network itself?

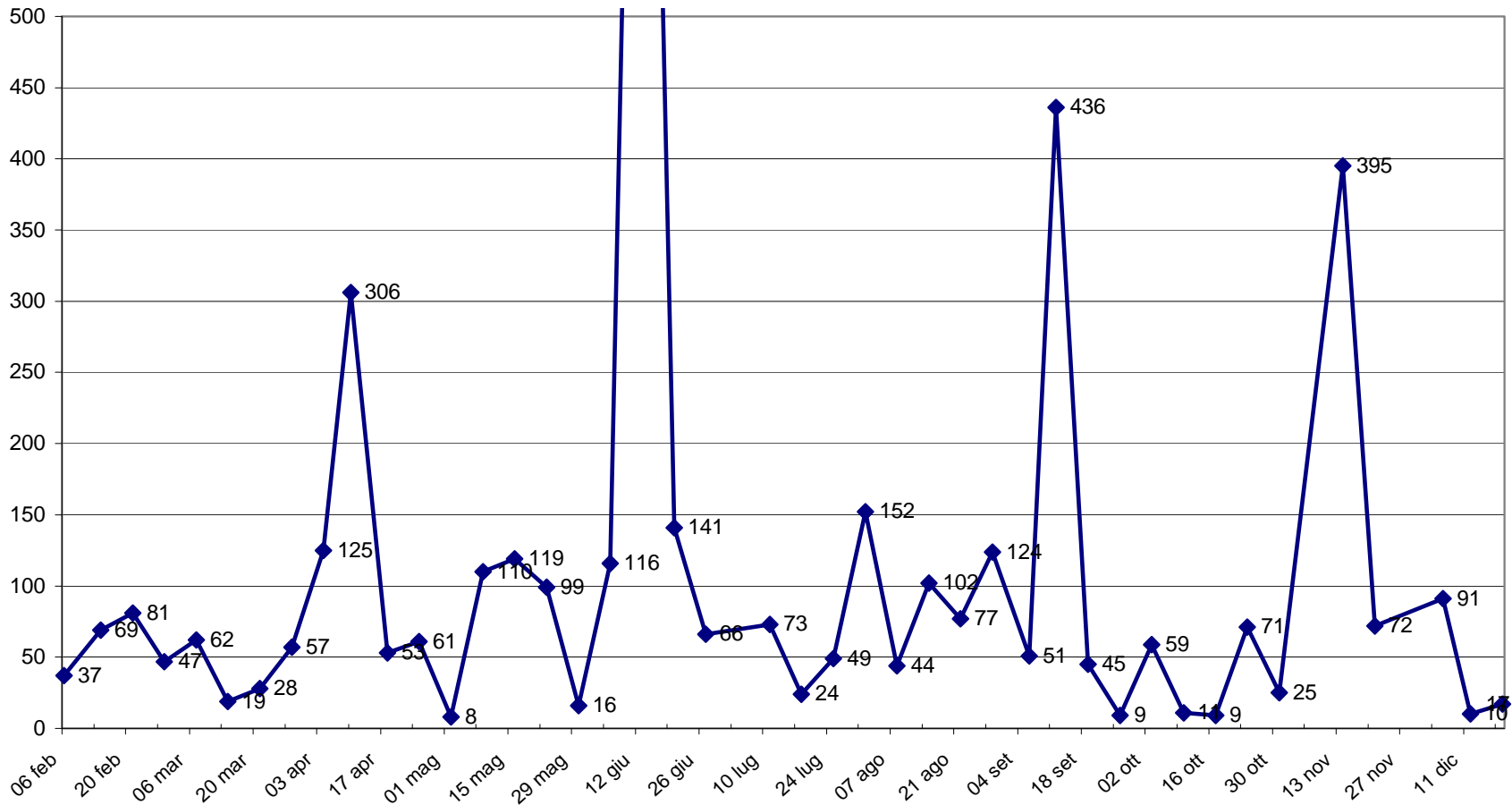


- **Setting: W3C - Web services Architecture Working Group**

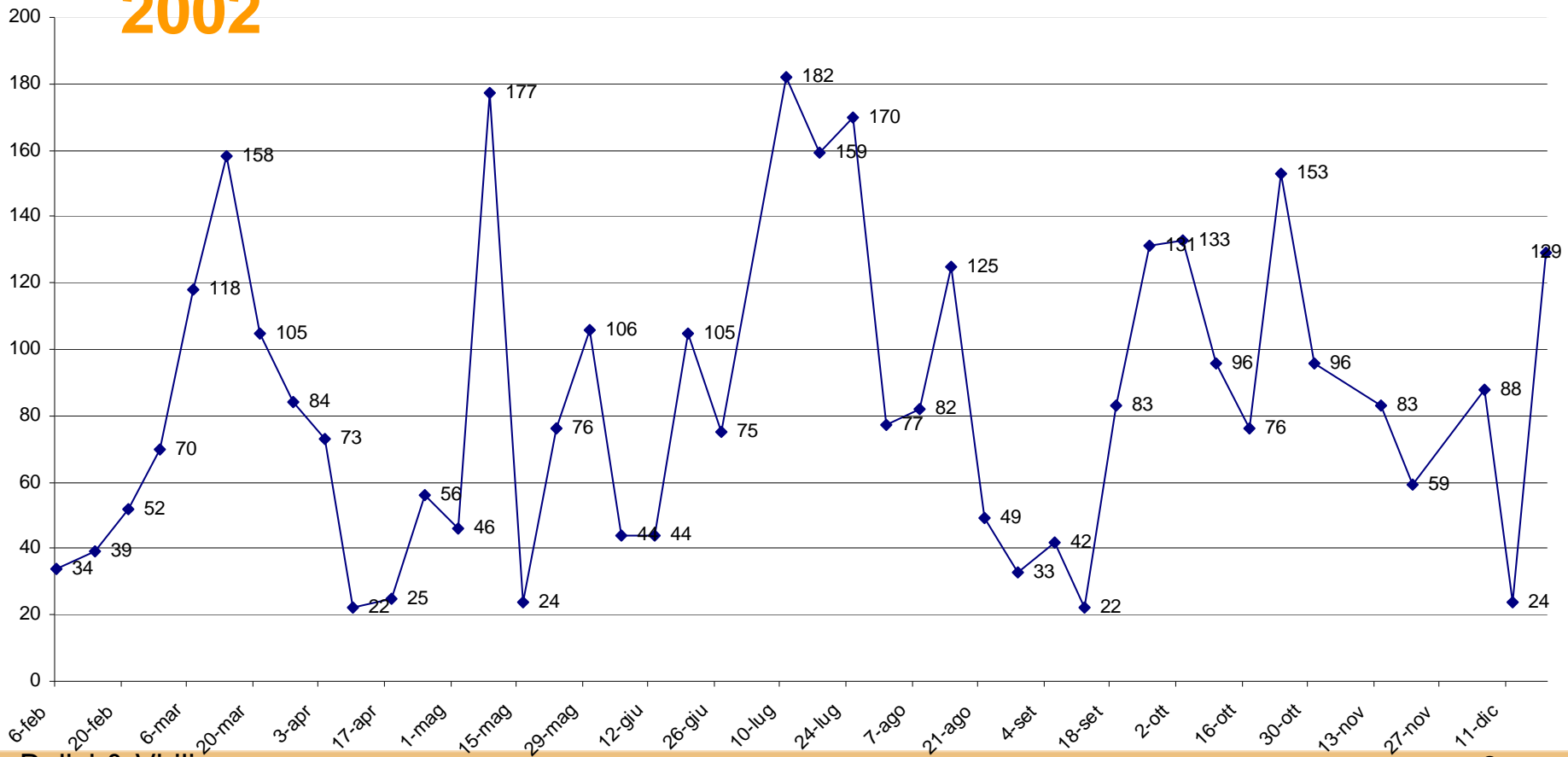


- **Sampling:**
 - mails and 45 meetings, from February to December 2002
- **Labelling: text size and text authorship for the discussions documented in the scripts (more than 4.500 text passages)**

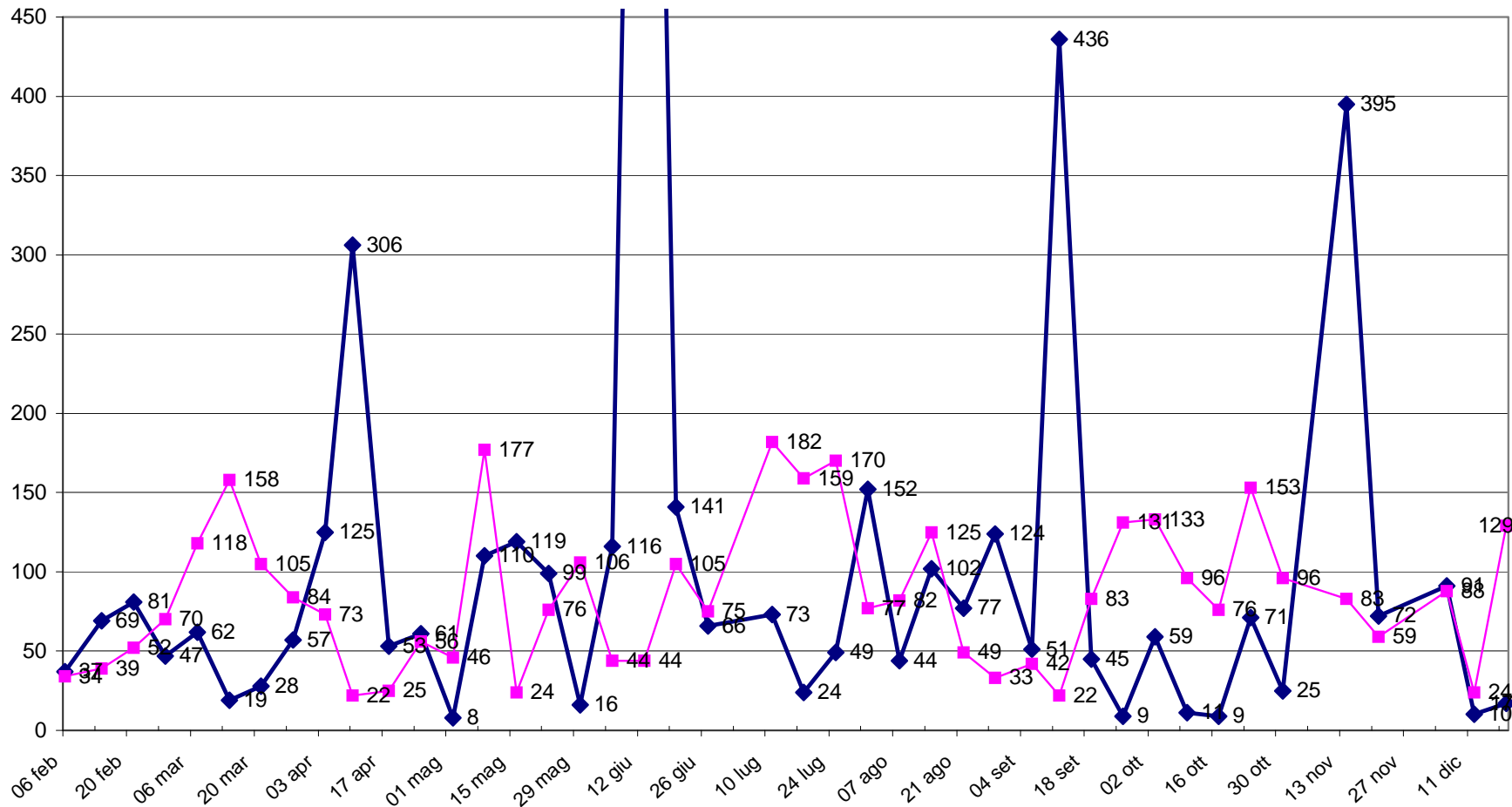
Number of text passages



• Mail selection (data triangulation): Feb-Dec 2002



Number of text passages and emails



- **Artefact Analysis**

- Sampling: we selected the first five artefacts for number of text passages, e.g.:

A. *ARCH document\F2F40 arch doc disc-revis*; 164 text passages;

B. *goals-requirements\20 DAR 6_1-13 security*; 160;

C. ...

Artefact/Actor	3	5	8	11	13	16	17	18	19	21	22	30	32	33	41	43	51
ARCH document (3.2.9.8)	7	0	10	10	23	1	20	0	3	13	3	0	0	0	1	0	21
Goals list (3.2.1.52)	45	14	8	3	0	38	11	0	0	0	0	0	1	0	0	13	12
ARCH document (3.2.9.9)	18	0	4	6	7	9	12	0	7	18	6	0	0	0	10	3	22
Goals list (3.2.1.43)	2	0	6	1	3	57	3	4	0	0	0	1	13	0	0	1	7
ARCH document (3.2.9.2)	27	2	3	2	10	8	8	0	0	9	0	0	20	17	0	1	0

- **Building an SNA matrix from the html email archives**
- [Required reading for the TAG](#) *Mark Baker (Tuesday, 5 February)*
 - [Re: Required reading for the TAG](#) *Christopher Ferris (Tuesday, 5 February)*
 - [Re: Required reading for the TAG](#) *Hugo Haas (Thursday, 7 February)*
 - [RE: Required reading for the TAG](#) *Munter, Joel D (Wednesday, 6 February)*
 - [RE: Required reading for the TAG](#) *David Orchard (Wednesday, 6 February)*
 - [RE: Required reading for the TAG](#) *Krishna Sankar (Wednesday, 6 February)*
 - [Re: Required reading for the TAG](#) *Doug Bunting (Wednesday, 6 February)*
- [FW: Introduction \(same copy as in w3c-ws-arch, minus the admin fluff\)](#) *Joseph Hui (Tuesday, 5 February)*
- [David Orchard introduction](#) *David Orchard (Tuesday, 5 February)*
- [Introduction](#) *Doug Bunting (Tuesday, 5 February)*
- [Introduction](#) *Anne Thomas Manes (Tuesday, 5 February)*
- [Charter](#) *Mark Baker (Tuesday, 5 February)*
- [Introduction](#) *Himagiri(Hima) Mukkamala (Tuesday, 5 February)*
- [Introduction](#) *michael.mahan@nokia.com (Tuesday, 5 February)*
- [Introduction](#) *Hugo Haas (Monday, 4 February)*
- [Introduction](#) *Edgar, Gerald (Monday, 4 February)*

- **SNA network structural dimensions**
 - Centrality
 - Size
- **Characteristics of the artefact being designed**
 - Complexity: number of components, diversity, links
 - Number of (intended) users
 - Use flexibility: many different (intended) task/goals
 - Change flexibility: being a fixed part of an evolving system (e.g. I/O bus)
 - Degree of uncertainty in design
- **future H: similar artefacts present similar network structures and different artefacts present different structures**

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- **Potential Contributions:**
 - understanding the network's GENESIS
 - analyzing the role of the artifact as coordination mechanism in DNs

- **Goals/requirements list (code 3 2 1)**
- **Architectural document (3 2 3; 3 2 9)**
- **Issues list (3 2 4)**
- **Glossary Document (3 2 5)**
- **Usage Scenarios Document (3 2 7)**