Overview of SPI activities and strategies in Europe

Dr Richard Messnarz
Chair EuroSPI www.eurospi.net
Vice President European Certification and Qualification Association
www.ecqa.org
Founding Member INTACS www.intacs.info
JRC Leader European Innovation Manager
Director ISCN www.iscn.com
Contents

• Shifting paradigms in SPI in Europe
  – Environment of Innovation
  – Engineering versus Management Practices
  – Topic Cluster Networking and Innovation Transfer
  – Human Empowerment Schema and Brain Drain Inversion
  – A Multidimensional Store for Improvement

• Future Vision of SPI and Networking

• Join the European SPI Communities
Company Profile

- ISCN Ltd Ireland (Coordination Office) founded 1994 in Ireland
  - Development offices in Austria
    - ISCN Regionalstelle founded 1997
    - I.S.C.N. GesmbH founded 2001
  - Further Consulting Offices in ISCN Group
    - SIBAC, Mittelbiberach (near Ulm), Germany
    - Performing Technologies, Vienna Austria
- EuroSPI Conference and Network Coordinator since 1994
- Vice President and Technology Provider for the European Certification and Qualification Association since 2005
- SPICE Assessments and Improvement Project since 1994
- ISCN Group Annual Turnover approx 2 million Euro (20 core staff)
Company Profile

- Accredited iNTACS™ training provider for ISO/IEC 15504 and Automotive SPICE®
- Accredited VDA-QMC training provider and partner
- Moderator of the German SOQRATES initiative, where 23 leading Germany companies share knowledge concerning process improvement.
- EU Research Projects since 1995
Paradigm 1:
Building on Environments
Empowering Innovation
Statement by the SUN innovation manager at a workshop in Nuremberg, 15.11.2005

**Profit - Strategy**

The best innovation takes place if with least possible effort (this included staff) the highest possible profit can be achieved.

Reference:
ECQA Certified Innovation Manager
2003 – now
www.ecqa.org
Result of 3 European studies including more than 300 firms in total

**Human capital intensive strategy**
Innovation is created by connecting innovative human resources who align their personal goals with the business achievements and help their organization to have competitive ideas which leads to an implementation and business success of the firm.

Reference:
ECQA Certified Innovation Manager
2003 – now
www.ecqa.org
Why?

Because Europe missed to offer such a human capital intensive strategy supporting new innovative minds for decades we lost a lot of human high skilled resources to the US and other continents where it was easier to implement the innovation.

European Implementation Strategy
Creating cross company task forces to jointly lead the Innovation and provide a learning culture supporting new ideas and minds. Examples - EADS, Automotive SPICE, Research in Physics CERN LHC, etc, Creating educational strategies to train managers for creating such concepts in European industry.

Reference:
ECQA Certified Innovation Manager 
2003 – now
www.ecqa.org
Learning Organisations

Innovation vs. cash cow project

Dynamic Learning Spiral
Innovation Teams

Standardise
Cash Cow

SPICE

Reference:
ECQA Certified Innovation Manager
2003 – now
www.ecqa.org
Paradigm 2:

Competence to manage complexity in engineering is of higher importance than classical management
Managing Complexity

Professional management of increasing complexity caused by the dependence of electronics, and software in the car.

Reference:
Daimler Chrysler AG,
EuroSPI 2001 Conference,
Limerick, Ireland
Automotive SPICE

- The new structure of the refined ISO/IEC 15504 permits to define process reference models compliant to the ISO standard

- Due to the demand for a standard adapted to the automotive industry, the largest European car manufacturers started the "Automotive SPICE” initiative
Understanding the Functional Dependencies

Professional Traceability of requirements related with mechanics, electronics, and software.

Reference:
Magna Powertrain AG,
Key Note,
EuroSPI 2008 Conference,
Dublin, Irland
Understanding the Functional Dependencies
From system to subsystem level – impact network

Automotive Manufacturer / Customer

Customer Requirement

Check: Vehicle Test
Acceptance Criteria: On a steep hill (> 20%) starting the car on a steep hill and use max additional power on one axle, and use internal measurement equipment to validate the 90 ms switching time. The mechanical wave shall not break.

Integrated System Designer

System Requirement

Component Mechanics

Component Sensors and Electronics

Component Operation System SW
Understanding the Functional Dependencies
From system to subsystem level – impact network

Component Sensors / ECU
The signal cycle times to receive the torque demand by the dynamic driving controller needs to be shortened, so that the message now comes in 5 and not any more 10 ms.

Component Mechanics
The material for the mechanical components must be newly calculated / designed so that it can bear up the higher physical pressure and heat due to the shortening of 25% of the time to build up the torque.

Component SW
The existing software module to control the gear switching needs to be configured with new application parameters to support the new system configuration.

Component Electronic / E-Motor
The E-Motor which is used to switch the gear in the E-Mechanical System needs to be upgraded to one which can do more RPMs (Revolutions per Minute) so that the gear switching time is reduced by 15 ms.
Traceability of changes

A performance controlled development with measurement of a trend of requirements coverage, test coverage, quality metrics, and resources used.

A study from DaimlerChrysler showed that a good project has ca. 48% stable requirements (does not change any more), ca. 25% are relatively stable (some changes are required) and ca. 27% are unstable requirements. Reference: EuroSPI 2001 und 2006 Conference.

Tracking of requirements coverage trends is a must!
Advantages

BMW Experiences, SPICE Days 2009 – Process and Product maturity are related

- Good example for goal-oriented product maturity

  90% of all errors found 11 month before SOP
  50% of all errors found 16 month before SOP
  Goal-oriented product maturity value: 58%

- Bad example for goal-oriented product maturity

  90% of all errors found 2 month before SOP
  50% of all errors found 8 month before SOP
  Goal-oriented product maturity value: 25%
# ASPICE Processes

## Acquisition Process Group

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACQ.3</td>
<td>Contract Agreement</td>
</tr>
<tr>
<td>ACQ.4</td>
<td>Supplier Monitoring</td>
</tr>
<tr>
<td>ACQ.11</td>
<td>Technical Requirements</td>
</tr>
<tr>
<td>ACQ.12</td>
<td>Legal and Administrative Requirements</td>
</tr>
<tr>
<td>ACQ.13</td>
<td>Project Requirements</td>
</tr>
<tr>
<td>ACQ.14</td>
<td>Request for Proposals</td>
</tr>
<tr>
<td>ACQ.15</td>
<td>Supplier Qualification</td>
</tr>
</tbody>
</table>

## Engineering Process Group

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>ENG.1</td>
<td>Requirements Elicitation</td>
</tr>
<tr>
<td>ENG.2</td>
<td>System Requirements Analysis</td>
</tr>
<tr>
<td>ENG.3</td>
<td>System Architectural Design</td>
</tr>
<tr>
<td>ENG.4</td>
<td>Software Requirements Analysis</td>
</tr>
<tr>
<td>ENG.5</td>
<td>Software Design</td>
</tr>
<tr>
<td>ENG.6</td>
<td>Software Construction</td>
</tr>
<tr>
<td>ENG.7</td>
<td>Software Integration</td>
</tr>
<tr>
<td>ENG.8</td>
<td>Software Testing</td>
</tr>
<tr>
<td>ENG.9</td>
<td>System Integration</td>
</tr>
<tr>
<td>ENG.10</td>
<td>System Testing</td>
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## Management Process Group

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<th>Description</th>
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<tbody>
<tr>
<td>MAN.3</td>
<td>Project Management</td>
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<tr>
<td>MAN.5</td>
<td>Risk Management</td>
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<tr>
<td>MAN.6</td>
<td>Measurement</td>
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</table>

## Support Process Group

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>SUP.1</td>
<td>Quality Assurance</td>
</tr>
<tr>
<td>SUP.2</td>
<td>Verification</td>
</tr>
<tr>
<td>SUP.4</td>
<td>Joint Reviews</td>
</tr>
<tr>
<td>SUP.7</td>
<td>Documentation</td>
</tr>
<tr>
<td>SUP.8</td>
<td>Configuration Management</td>
</tr>
<tr>
<td>SUP.9</td>
<td>Problem Resolution Management</td>
</tr>
<tr>
<td>SUP.10</td>
<td>Change Request Management</td>
</tr>
</tbody>
</table>

## Supply Process Group

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>SPL.1</td>
<td>Supplier Tendering</td>
</tr>
<tr>
<td>SPL.2</td>
<td>Product Release</td>
</tr>
</tbody>
</table>

H, Fi, Fo

H = HIS-Group, Fi = Fiat, Fo = Ford
CMMI vs ASPICE

In European Assessment Models (Automotive SPICE®, S4S, Medical SPICE,…)
we assess more engineering than management processes
- HIS Scope = 10 Engineering and 5 management processes
- In CMMI at staged Level 2 there are no engineering processes and at staged level 3 the 21 processes are 15 management and 6 engineering related. (= weighting in the other direction)

CMM/I is based on 1987 views
At this time the most advanced car had one or 2 computers and no bus, no Internet
developed was there at this time. Highest complexity for managers to learn to deal with SW as part of the product in general.

We need to base on 2012 views
Car with above 100 computers, real time bus, car functions distributed among many ECUs, protocols and Internet connecting. Highest complexity to manage the functionality, availability and safety of the system by engineering methods.
Paradigm 3:
Expert Cluster Networking and Innovation Transfer
Collaborating Networks

Building on expert clusters and creating communities of SPI across different countries

- SPI (System, Service, Software) Network
  EuroSPI
- Packaging of Knowledge and Transfer Strategy by ECQA
- Systems and Product Engineering Network
  EMIRacle
- Industry Task Forces e.g. SOQRATES
- Assessor Network INTACS
Mission & Goals

EuroSPI²’s mission is to develop an experience and knowledge exchange platform for Europe where SPI practices can be discussed and exchanged and knowledge can be gathered and shared. This mission is implemented by the following major action lines:

- An annual EuroSPI² conference supported by Software Process Improvement Networks from different EU countries.

- EuroSPI² supported the establishment of a world-wide SPI Manifesto with SPI values and principles agreed among experts world-wide. We build clusters of experts and knowledge libraries for these values and principles.

- Establishing an internet-based knowledge library based on hundreds of experience reports has been contributed to EuroSPI² since 1994.

- Establishing an European Qualification Framework for a pool of professions related with SPI and management. This is supported by European certifices, exam systems, and online training platforms (European Certification and Qualification Association).

- Establishing a world-wide newsletter with articles from key industry and key European research associations helping to implement the SPI manifesto world-wide.
Workshop Communities and Workshops 2012

Key Speakers - Moderation - Discussion - Exercise

Since 2010 a set of continuously organised interactive workshops has been taking place at EuroSPI conferences. Workshop communities are built up and results are published at this website.

Each workshop lasts a whole day, includes industry and research key note speakers and allows participants to contribute actively. The results of the workshops are outlined in workshop summaries concluding discussions and providing new ideas. These workshop summaries are published every year. These workshops are interactive with open discussion. Participants work with the speakers to elaborate key statements for follow up research for the next year.

Community 1: Creating Environments Supporting Innovation and Improvement more...
- Workshop 2012: Innovating Innovation: It is time to take the next step - come and take part
- Process Product and Service innovation
- Social Responsibility as a fruitful ground for innovation

Community 2: SPI and Product, System, Software Design more...
- Workshop 2012: Standards and Experiences with the Implementation of Functional Safety
- Integrated Design Principles
- Agile Design Principles
- Functional Safety Standards and Design Principles

Community 3: SPICE Assessors: Exchanging Experiences across Assessment Models more...
- Workshop 2012: Experiences with Tailoring and Agile and Maturity Models (in cooperation with Gate4SPICE meetings organised by INTACS™)
- Exchanging Experiences across Assessment Models

Community 4: Business Process Innovation and Improvement more...
- Workshop 2012: Business Process Management (CertifiBPM)

Community 5: SPI and Measurement more...
SPI Manifesto

VALUES

*We truly believe that SPI*

---

**A | People | Must involve people actively and affect their daily activities**

NOT to show-off or be focused on management alone

---

**B | Business | Is what you do to make business successful**

NOT to live to deploy a standard, reach a maturity level, or obtain a certificate

---

**C | Change | Is inherently linked with change**

NOT continuing as we do today

---

European Key Note – Dr Richard Messnarz
JASPIC Event, Tokyo, Japan – 1.6.2012
PRINCIPLES

We trust that the following principles support the values

People
- Know the culture and focus on needs
- Motivate all people involved
- Base improvement on experience and measurements
- Create a learning organisation

Business
- Support the organisation’s vision and objectives
- Use dynamic and adaptable models as needed
- Apply risk management

Change
- Manage the organisational change in your improvement effort
- Ensure all parties understand and agree on process
- Do not lose focus
News from the 7th Framework Programme

In our Co-Research service, we are involved in:

- The 'Visionair' project

In the framework of the FP7 (Seventh Framework Programme) in research supported by the European Commission, the proposal we have initiated concerning an innovative research infrastructure in scientific 3D visualization has been accepted.

Visionair flyer available here

Our Activities in Lifelong Learning

In our Co-Academy service, we offer:

- iDesigner (Certified Integrated Design Engineer)
Packaging Strategy

- Network
- Expert Cluster
- Partners

- Training
  - Course
- Skills Set
  - European Expert Committees
- Recognition
  - European Certificate
  - www.ecqa.org
A world wide unified certification schema for numerous professions:

- Experts from various markets **define the appropriate content** needed for a certain profession (a skill card).
- Exam committees **develop and update a related exam pool** for common usage on an international level.
- A certified examination body **offers and supervises exams**.
- A certification body (ECQA or accredited certification organization) **issues certificates**.
- Certified participants are **internationally promoted**.
Exam Portal

Infrastructure for **exams** and **courses**:

- **Organisation**: Real Security
- **Test**: Test Maribor
- **Participant**: Ioli Ioli
- **ID**: realsec001-1692-291

Management should be involved in Maintenance step because:

- [ ] Management configuration support costs, without knowing why they are important
- [ ] Management is interested in configuration changes
- [ ] Regular education should be provided for users and staff working with solutions
- [ ] Management doesn’t need to be involved in Maintenance

Detailed technical solution should be discussed with management.

Assessment

<table>
<thead>
<tr>
<th>Test Maribor</th>
<th>ID: realsec001-1692-291</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Elements</strong></td>
<td><strong>Percentage in %</strong></td>
</tr>
<tr>
<td>Management Awareness and Control</td>
<td>40%</td>
</tr>
<tr>
<td>EU and National Standards and Laws and EU Regulation</td>
<td>85.1%</td>
</tr>
</tbody>
</table>

European Key Note – Dr Richard Messnarz
JASPIC Event, Tokyo, Japan – 1.6.2012
**ECQA Certified SPI Manager**

**Software Process Improvement 2009**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPI.U1</td>
<td>SPI Involvement and Communication</td>
</tr>
<tr>
<td>SPI.U2</td>
<td>Improvement Models</td>
</tr>
<tr>
<td>SPI.U3</td>
<td>Managing Process Improvement</td>
</tr>
<tr>
<td>SPI.U3.E1</td>
<td>Supporting Top Manager for Organisational Change Management</td>
</tr>
<tr>
<td>SPI.U3.E2</td>
<td>SPI Drivers Analysis</td>
</tr>
<tr>
<td>SPI.U3.E3</td>
<td>Alignment of SPI Goals to Business Goals</td>
</tr>
<tr>
<td>SPI.U3.E4</td>
<td>Process Measurement, Data Collection and Analysis</td>
</tr>
<tr>
<td>SPI.U3.E5</td>
<td>SPI Leadership</td>
</tr>
<tr>
<td>SPI.U4</td>
<td>SPI Implementation</td>
</tr>
</tbody>
</table>

**Software Process Improvement Manager 2009**

<table>
<thead>
<tr>
<th>Process Improvement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Process Improvement</td>
<td>Unit Managing Process Improvement (MPI) contains three elements: top management support, needs and drivers for process improvement, alignment of SPI goals with business goals, process measurement and data collection and analysis. The goal of SPI management unit is to link process improvement with relevant business goals of the organization.</td>
</tr>
</tbody>
</table>

**SPL.U3.E3 Alignment of SPI Goals to Business Goals:**

| SPL.U3.E3 PC1 | She/he can create structures that define process improvement goals from business goals. |
| SPL.U3.E3 PC2 | She/he can demonstrate how the PI activities benefit the business strategy for all levels in the organisation. |
| SPL.U3.E3 PC3 | She/he can create a measurement framework that allows to correlate business factors with improvement factors. |
| SPL.U3.E3 PC4 | She/he can assure that senior management has the process performance information they need to relate process performance to process improvements. |
| SPL.U3.E3 PC5 | She/he assure that the PI strategy is aligned with senior management strategies. |
| SPL.U3.E3 PC6 | She/he uses measures to show how the PI activities support business strategies at all organisational levels. |
### Integrated Design Engineer

**IDES.U1 The Reasons for Integration**

- IDES.U1 Integration as a Means to master Complexity

**IDES.U1.E2 Functional Reuse:**

- Use aware Design Principles

**IDES.U4.E3 Requirements Engineering in Integrated Design**

**IDES.U4.E4 Design Thinking for Innovation**

**IDES.U4.E5 Solving Design Problems and Innovating using TRIZ**

**IDES.U5 Knowledge Management for Integrated Design**

**IDES.U6 Collaborative Integrated Design**

**IDES.U7 Selected Aspects of Integrated Design**

### Integrated Design Engineer

**Mastering Complexity and Innovation**

Nowadays mechanics can no longer control and repair a car with their own competences in mechanics and technology. Today, a car is so complex that we need to merge competences in mechanics, electronics, computer sciences, automation, etc. to be able to understand a minimum before starting to repair it. Systems engineering is an interdisciplinary field of engineering that focuses on how complex engineering projects should be designed and managed. Issues such as logistics, the coordination of different teams, and automatic control of machinery become more difficult when dealing with large, complex projects. Systems engineering deals with work-processes and tools to handle such projects, and it overlaps with both technical and human-centred disciplines such as control engineering and project management. Systems Engineering focuses on defining customer needs and required functionality early in the development cycle, documenting requirements, then proceeding with design synthesis and system validation while considering the complete problem: the system life-cycle. Depending on their application, although there are several models that are used in the industry, all of them aim to identify the relation between the various stages mentioned above and incorporate feedback. Examples of such models include the Waterfall model and the VEE model. System development often requires contribution from diverse technical disciplines. By providing a systems (holistic) view of the development effort, systems engineering helps meld all the technical contributors into a unified team effort, forming a structured development process that proceeds from concept to production to operation and, in some cases, to termination and disposal. This unit focuses on the key role that design has in systems engineering with a focus on systems that should be turned into products that are successful on the market.

**IDES.U4.E2 Functional Re-Use aware Design Principles:**
• www.ecqa.org
INTACS

www.intacs.info (International Assessor Certification Shema)

More than 600 assessors

Board of multinational companies

(you can join)

Support for market

Launch of SPICE PAMs
Industry Task Forces

More than 24 multinational companies

Knowledge Topics
Annual Knowledge Releases

Continental Automotive, Elektrobit, Giesecke & Devrient, Grenoble INP, HELLA, ISCN, KTM, Magna, Methodpark, SIBAC, SQS, TU Graz, ZF Friedrichshafen AG, Software Factory, EDV GesmbH, Etc.
Paradigm 4: Human Empowerment Schema
HR Innovation

Evolution of social systems

- integral networks
- integrated community
- communities of values
- constitutional states
- early nations
- feudal empires
- ethnic tribes
- surviving clans

Existential level of senses

- postmodern society
  - Raising motivation & stimulating senses
    self-regulated exchange of the social system with inner nature

- society of industrial capitalism
  - Value
    self-regulated exchange of the social system with outer nature

- developed high culture
  - Legal security
    self-monitoring social system with state-based regulations

Problem of differentiation

- neolithic society
  - lacking resource: Power over nature
    Harmonizing society with the natural environment

Source: Habermas, Wilber
HR Innovation

If you want to build a ship, don't drum up men to collect wood; instead, teach them their wish for the vast and endless sea

Antoine de Saint-Exupéry

We, today exist on a level of senses raising motivation and stimulating senses

value

legal security

power over nature

If you want to build a ship, don't drum up men to collect wood; instead, teach them their wish for the vast and endless sea

Antoine de Saint-Exupéry

Why do I always receive a brain when I only ask for some hands?

Henry Ford

If you want to build a ship, don't drum up men to collect wood; instead, teach them their wish for the vast and endless sea

Antoine de Saint-Exupéry

Why do I always receive a brain when I only ask for some hands?

Henry Ford
<table>
<thead>
<tr>
<th>What we need are <strong>Answers, Answers, Answers</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ How ORGANIZATIONS are capable of being changed</td>
</tr>
<tr>
<td>▪ How PEOPLE will cooperate in the future</td>
</tr>
<tr>
<td>▪ How SUCCESS will be defined in the future</td>
</tr>
<tr>
<td>▪ How I can use my employees' POTENTIAL</td>
</tr>
<tr>
<td>▪ How I can make the best out of the ABUNDANCE of available human KNOWLEDGE</td>
</tr>
<tr>
<td>▪ How TECHNOLOGICAL and SOCIAL change are intertwined and reinforce each other</td>
</tr>
<tr>
<td>▪ How CULTURAL changes can be overcome</td>
</tr>
</tbody>
</table>

**A Company that doesn’t manage this successfully, will disappear!**

*Source: Förster, Kreuz*
### Social Responsibility Manager

#### SRM.U1 Understanding social resp
- SRM.U1.E1 Understanding and recognizing SR
- SRM.U1.E2 Principles of SR
- SRM.U1.E3 Stakeholder identification and engagement

#### SRM.U2 Core subjects of SR
- SRM.U3 Processes for SR manage!

#### SRM.U1.E3 Stakeholder identification and engagement:
- **SRM.U1.E3.PC1**: The student understands organization’s sphere of influence.
- **SRM.U1.E3.PC2**: The student knows how to identify organization’s stakeholders.
- **SRM.U1.E3.PC3**: The student knows how to analyze relationship between organization and stakeholders.

Globalization and several crises fortified the impression that organizations exist in a legal and moral vacuum and that they are not responsible for the impacts of their decisions and actions. The examples of negative behaviour induce a loss of reputation for many organizations. Both, ethical and strategic considerations motivated social responsible behaviour to encounter these negative developments. The Unit "Understanding social responsibility (SR)" consists of the following elements: - Understanding and recognizing SR - Principles of SR - Stakeholder identification and engagement.
Paradigm 5: A Multidimensional Store for Improvement
Since its beginning in 1994 in Dublin, the EuroSPI initiative has outlined that there is not a single silver bullet to solve SPI issues, but that you need to understand a combination of different SPI methods and approaches to achieve concrete benefits. Therefore each proceedings volume covers a variety of different topics, and at the conference we discuss potential synergies and the combined use of such methods and approaches.

Reference:
EuroSPI Strategy 1994 - now
Assessments & Learning Organisations

Assessment

Learning System

Best Practice Roll Out
Integrated Portals

Trial Assessments Combining at ZF DAIMLER/BOSCH
Now starting in other partner companies

ISO 26262 Part: 6.6 Specification of software safety requirements
Chapter: 6.6.4.2
The specification of the software safety requirements shall be derived from the technical safety requirements and the system design (see ISO 26262-4, 7.4.1 and ISO 26262-4, 7.4.5) and shall consider the system and hardware configuration.

Table ENG.3-1 Methods and measures for analysing system design

<table>
<thead>
<tr>
<th>ASIL</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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Table ENG.3-2 Methods and measures for separating subsystems

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<td>2</td>
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</tbody>
</table>
Improvability Model

Analysing the improvement approach with the highest probability of success.

- Foundation Expectation management
  - Foundation.1
  - Foundation.2
- Foundation Knowledge management
- Foundation Management competences
- InUse1 Deployment Strategy
- InUse2 Product Quality
- InUse3 Deployment means
- InUse4 Roles and responsibility
- InUse5 Operations and maintenance
- Init1 Sensing urgency
- Init2 Idea processing
- Project1 Project team
- Project2 Process
- Project3 Competence and Knowledge
- Project4 Prioritising
- Project5 Goals and Requirements
- Project6 Management commitment
- Project7 Involvement of others

Matrix

Project size
Scope of change
Technology and appl. Domain
Importance for org.

Improvement Strategy Analysis
Developed by DELTA /EuroSPI
Vision

Building a Dynamic Continuously Growing and Innovating Space of SPI Best Practices

No focus on just one method, a store of methods!
Entry Points

- System design experience exchange
  - www.emiracle.eu
- European Certification and Qualification Association
  - www.ecqa.org (>6700 certified worldwide, growing)
- SPI experience exchange
  - www.eurospi.net (>30 countries)
- Assessor Experience exchange
  - www.intacs.info (>600 assessors)
- Industry Task Forces Collaboration
  - SOQRATES - Leading central European industry (by request and invitation) > 24 multinational active companies
Invitation

• Join the Job Role Committee ECQA Certified SPI Manager
  – Based on SPI Manifesto
  – JRC leader: tomas.schweigert@sqs.de

• Actively create win-win experience exchange with European industry and research
  – EuroSPI 2013 in Ireland, 26.-28.6.2013
  – Chair: rmess@iscn.com
  – Adrienne Clarke, aclarke@iscn.com

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rmess@iscn.com