Service management: what standards can do for business – the example of FitSM

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AGENDA

12:00 – Welcome and presentation of speakers	**5’**
12:05 – Introduction	**5’**
12:10 – Why ITSM? Why not ITIL?	**10’**
12:20 – Introducing FitSM	**10’**
12:30 – Implementation: EGI.eu	**5’**
12:35 – Implementation: LRZ	**5’**
12:40 – Open discussion	**20’**

Who are we?

Increase maturity and effectiveness of (IT) Service Management in Federated e-Infrastructures by applying suitable good practices.

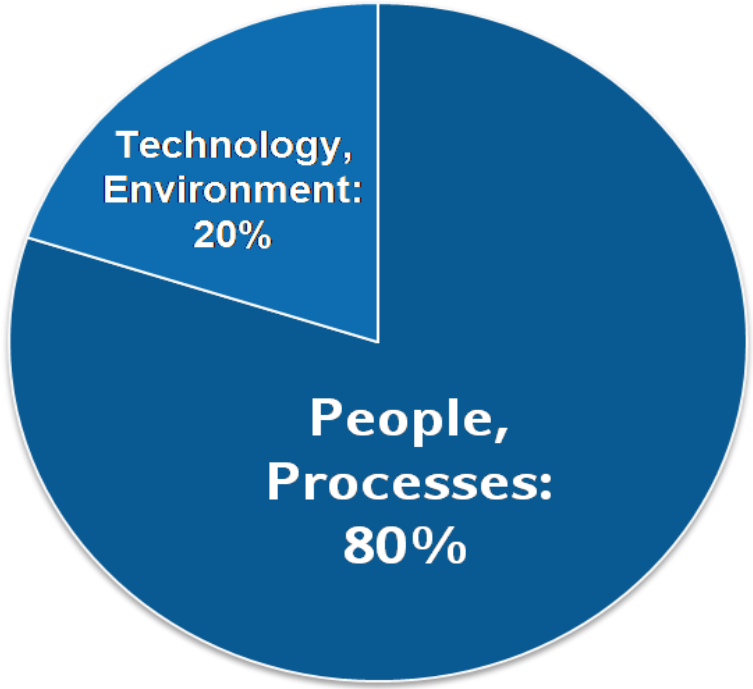
Owen Appleton

Managing Director,
Emergence Tech Limited

Why ITSM? Why not ITIL?

Why IT service management is needed

- Why IT service management (ITSM)?
  - About 80% of all IT service outages originate from "people and process issues"
  - Duration of outages and degradations significantly dependent on non-technical factors
- IT service management …
  - … aims at providing high quality IT services meeting customers' and users' expectations …
  - … by defining, establishing and maintaining service management processes.



Reasons for service outages
[Gartner, 2001]

Service and Value

- Service is…
  - … a means of delivering **value** to customers …
  - … by supporting them in **achieving** their **goals**.

- What is value from a customer perspective?

Why would a customer be interested in the service?

How can the provider guarantee to meet the agreed quality?

What is a "Service”

- Accommodation
- Concierge
- Escalators
- Elevators
- Restaurant
- In-room dining
- Front desk
- Housekeeping
- Laundry
- Free TV
- Pay TV
- Minibar
- Telephone
- Wired Internet
- Wireless Internet
- Pool
- Fitness
- Congress rooms
- Limousine
- Hotel website
- Safety facilities
- Room lights
- Room heating
- Room air conditioning
- Room furniture
- Bathroom facilities
- Room decoration
- Cleaning

Example: Hotel

- Car park
- Illuminated hotel sign
- Room reservation system
- Invoice system
- Music in the lobby
- Music in the elevator
- Room locks / key card readers
- "Do not disturb" sign
- Coat hook in room

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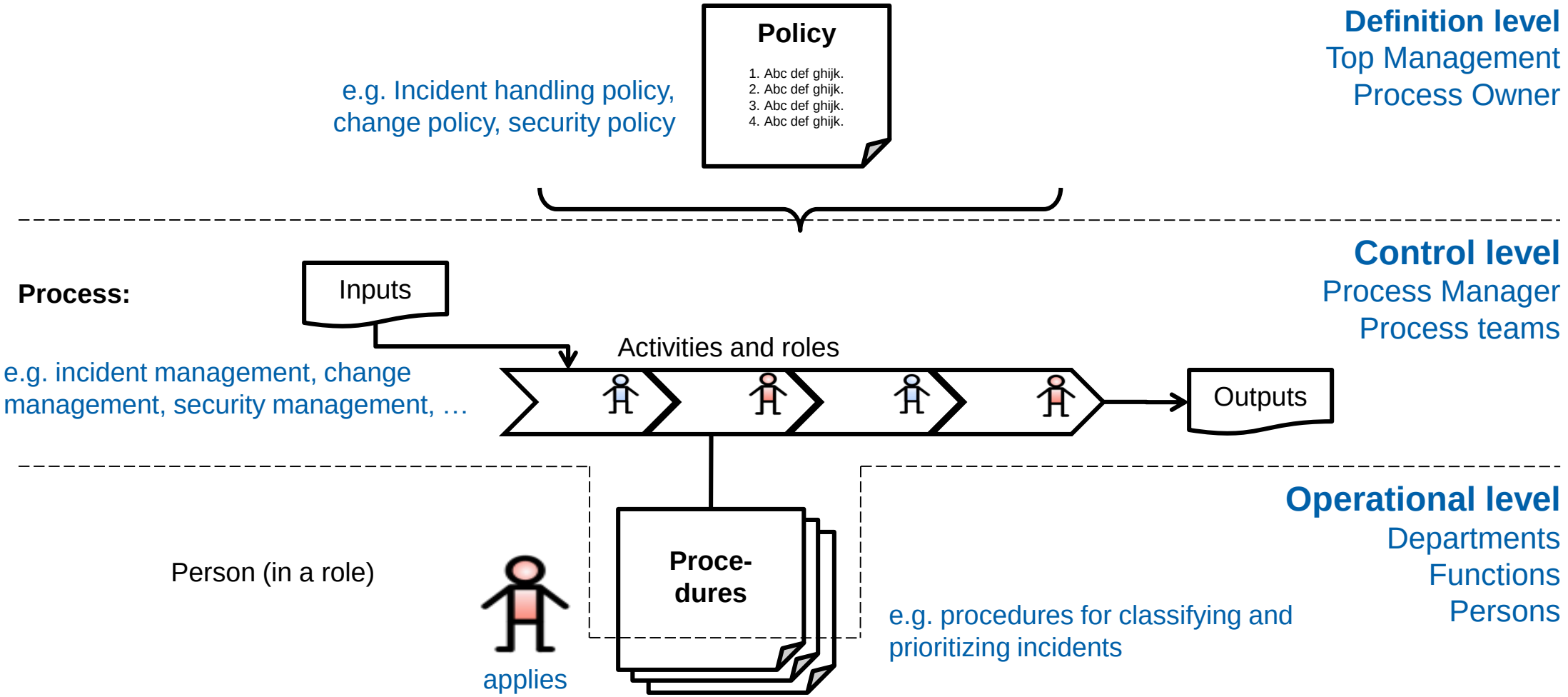
What is management?

- Management in general
  - Coordinating people and capacities to accomplish desired results
- Management for an organisation:
  - Framework of policies, processes and procedures to allow repeatable achievement of organisational objectives.
  - → Management system

Service management system (SMS)



ITIL, ISO/IEC 20000, COBIT

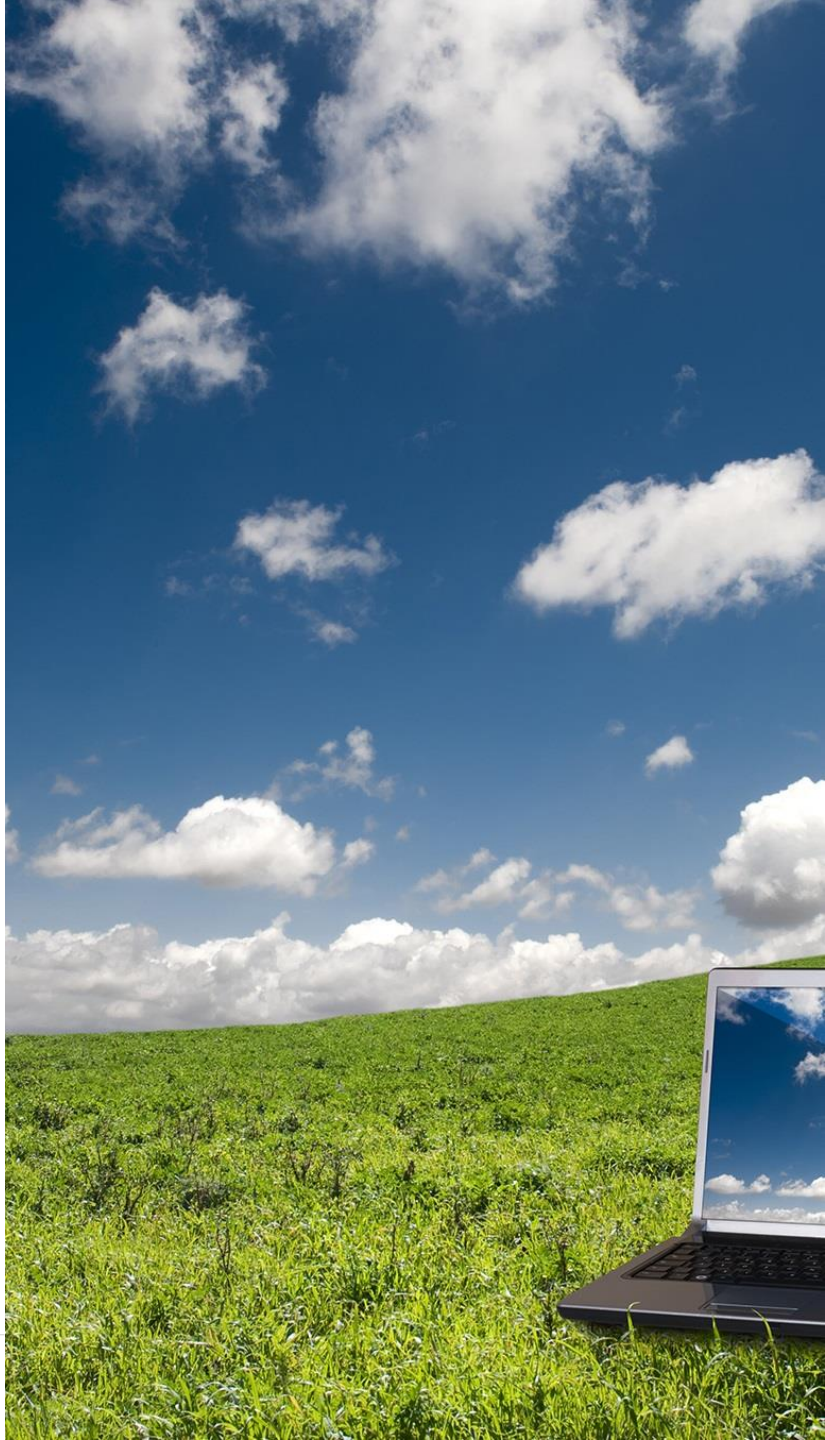
IT Infrastructure Library® • Number of books with "good practice" in IT Service Management • Slogan: "the key to managing IT services" • Descriptions of key principles, concepts and processes in ITSM	• Most popular and wide-spread framework • Not a "real" standard, but often related to as "de-facto standard" • 5 books released by the British Cabinet Office
ISO/IEC 20000 • International standard for managing and delivering IT services • Defines the “minimum” requirements on ITSM but still many of them.	• Developed by a joint committee (JTC) of ISO and IEC • Based on ITIL®, BS 15000 • Auditable, certifiable
Control Objectives for Information and Related Technologies • IT Governance framework • Specifies control objectives, metrics, maturity models	• Developed by ISACA • can be combined with ITIL® and ISO/IEC 20000

A Typical ITSM problem

- You are told:
  - *"All incidents shall be recorded, classified, prioritized and escalated according to a defined procedure"*
- But….
  - there is no defined procedure! It relies on the judgment of whoever is dealing with the issue.
  - you can't record everything easily as well there is a ticket system, everyone knows that Dave is the one that can fix things so they just call him, and he never has time to record things.
  - when new formal procedures are instituted, everyone ignores then because they are a waste of time and the staff already know how to do their jobs!

Why not ITIL?

- Traditional service management practices …
  - assume single central control over all service management processes by the service provider
  - poorly address collaborative approaches to service delivery
  - are written in a very “management speak” manner that is not well accepted by academics and researchers
  - are very “heavyweight” and often look and are unachievable, in terms of complexity, cost and organization change for academic and research orgs.
- Start-ups, (smaller) SMEs and non-traditional service providers are poorly served by IT Service Management systems



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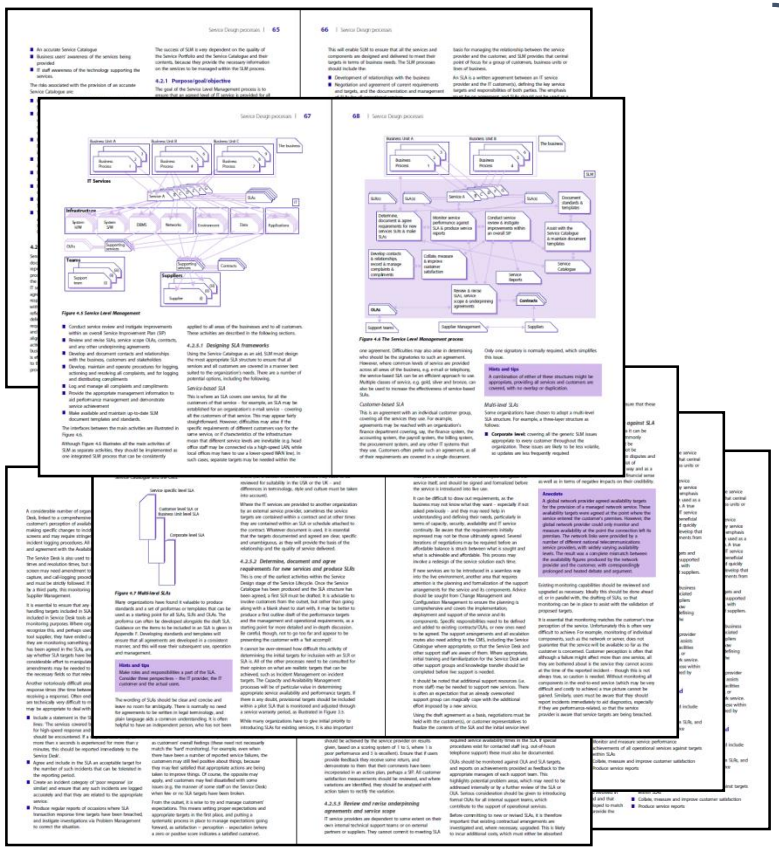
Introducing FitSM

- FitSM is a family of standards for lightweight IT service management (ITSM)
- Made up of several documents, providing guidance and input on different aspects of ITSM
- Suitable for IT service providers of any type and scale
- Main design principle: **Keep it simple!**
- All parts freely available:

www.fitsm.eu

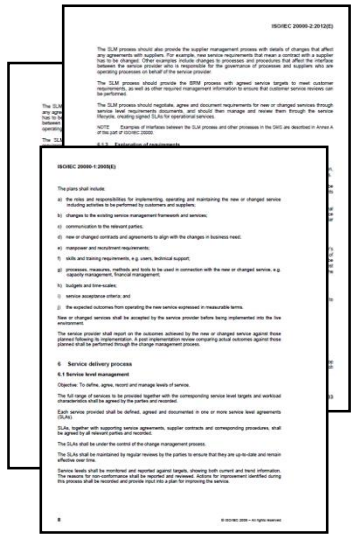
The development of the FitSM standards is supported and funded by the European Commission through the EC-FP7 project "FedSM"

FitSM, ISO/IEC 20000 and ITIL



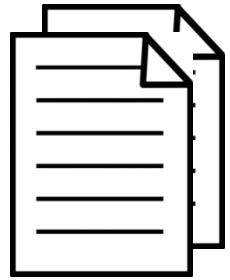
ITIL (good practices)

- About 2,000 pages (5 core books)
- No requirements



ISO/IEC 20000

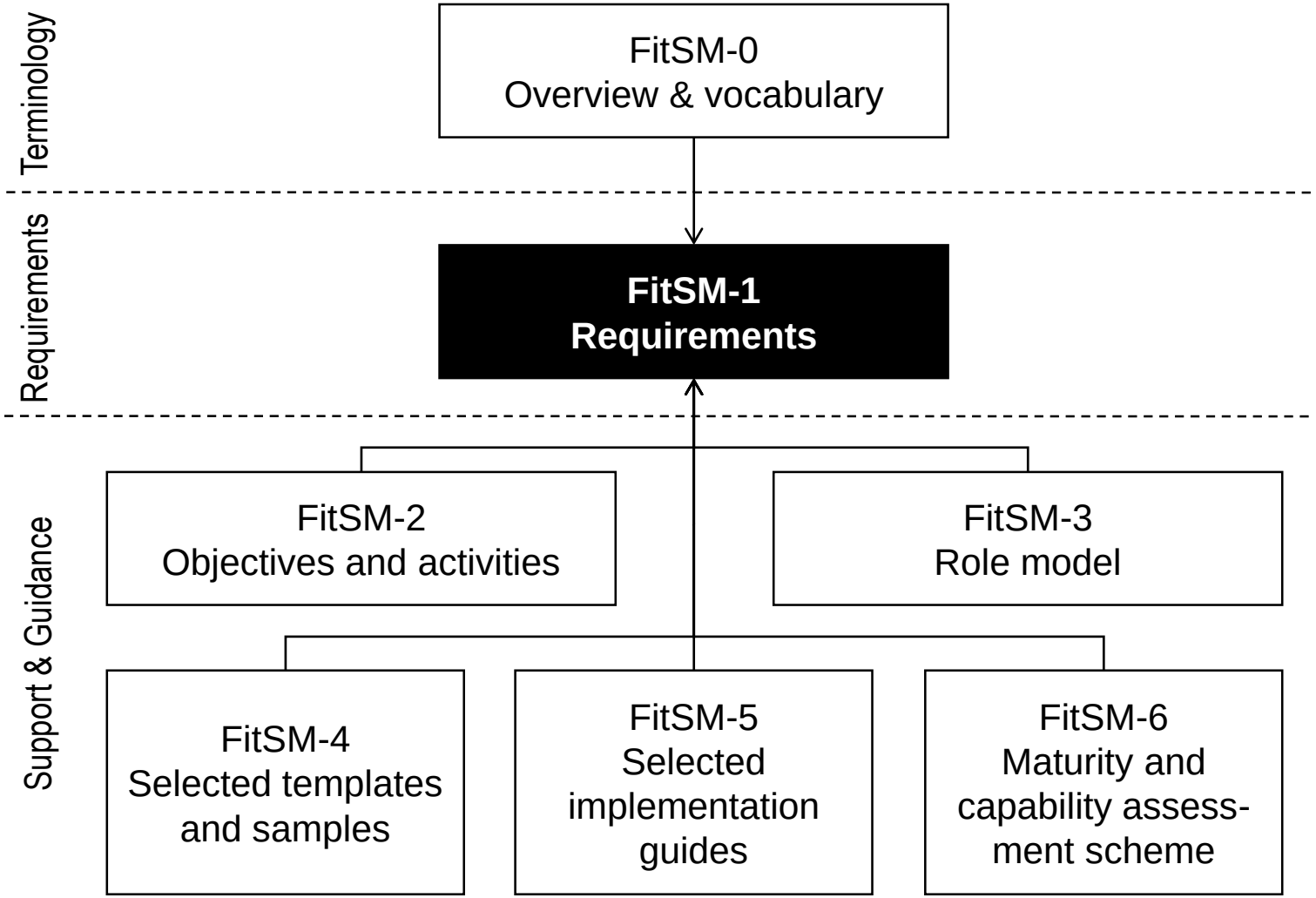
- 136 pages (3 core documents)
- 26 pages of requirements (part 1)



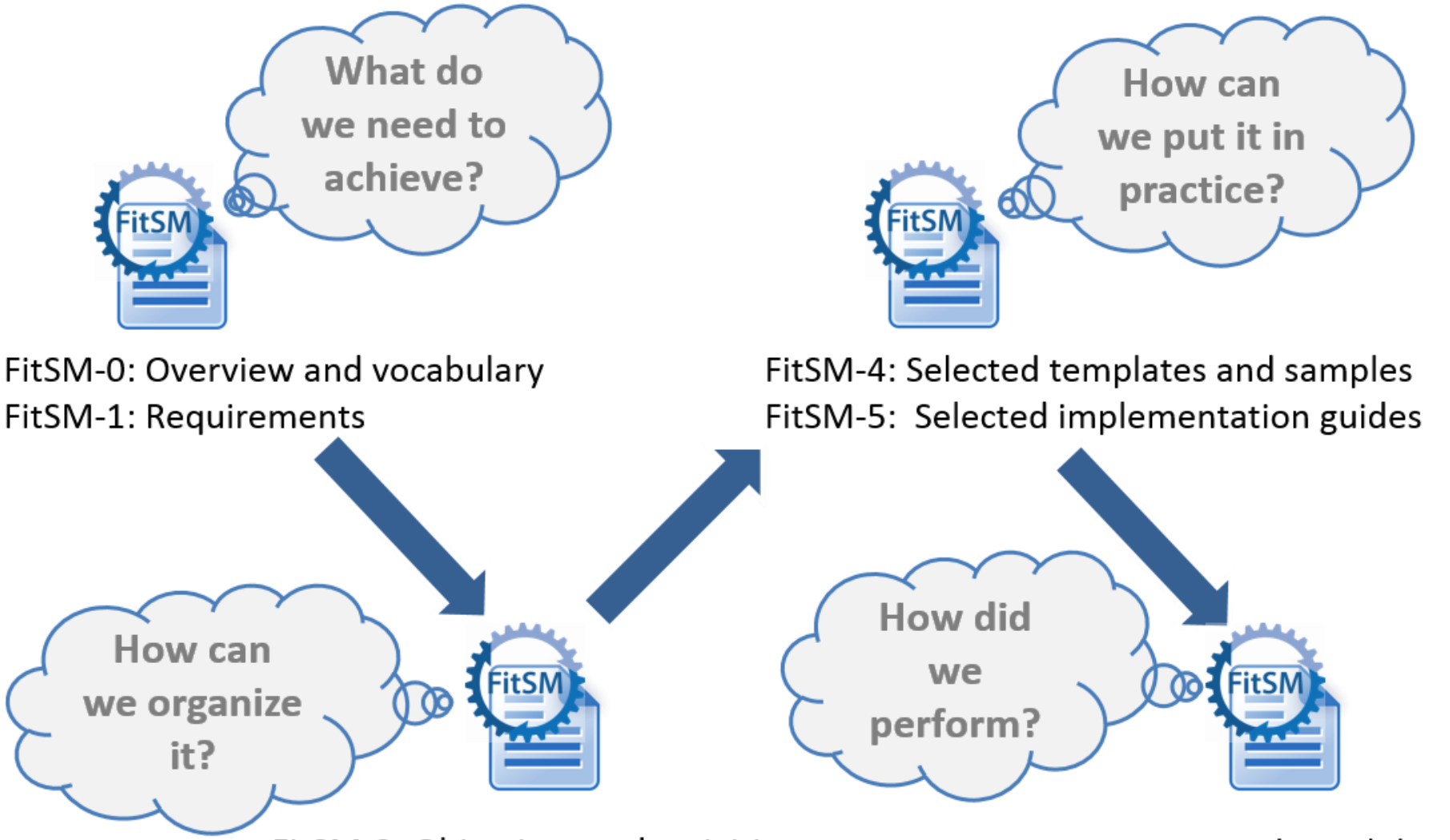
FitSM

- 38 pages (4 core documents)
- 9 pages of requirements (part 1)

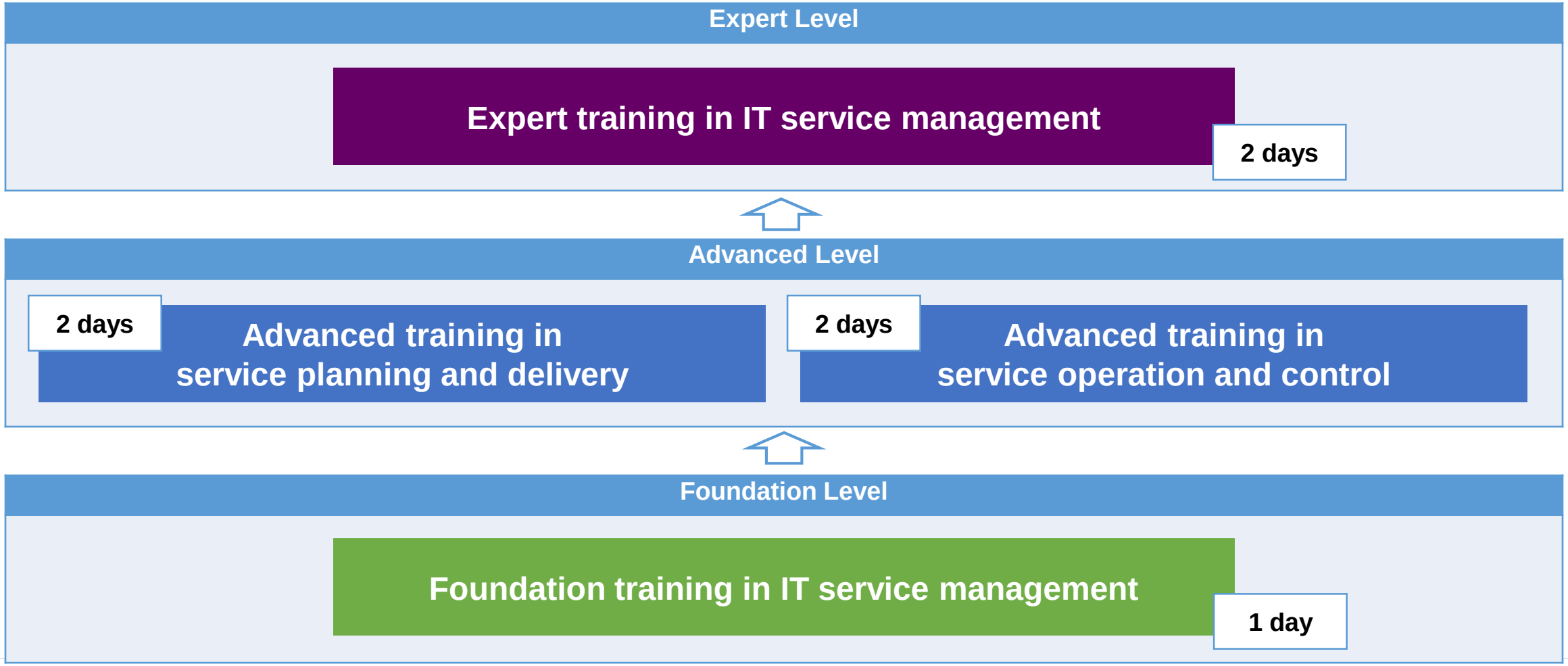
FitSM parts



FitSM logic



FitSM Qualification Program



- FitSM-0 defines 70 important terms from the ITSM context
- In alphabetical order:

- Accessibility of information
- Activity
- Assessment
- Audit
- Availability
- Capability
- Capacity
- Change
- Classification
- Closure
- Competence
- Compliance
- Confidentiality of information
- Configuration baseline
- Configuration item (CI)
- Configuration management database (CMDB)
- Continuity
- Customer
- Document
- Effectiveness
- Efficiency
- Escalation
- Federation member
- Federator
- Incident
- Information security
- Information security control
- Information security event
- Information security incident
- Integrity of information
- IT service
- IT service management (ITSM)
- Key performance indicator (KPI)
- Known error
- Management system
- Maturity
- Nonconformity
- Operational level agreement (OLA)
- Operational target
- Policy
- Post implementation review
- Priority
- Problem
- Procedure
- Process
- Record
- Release
- Request for change
- Risk
- Role
- Service
- Service acceptance criteria (SAC)
- Service catalogue
- Service component
- Service design and transition package
- Service level agreement (SLA)
- Service management
- Service management plan
- Service management system (SMS)
- Service portfolio
- Service provider
- Service report
- Service request
- Service target
- Supplier
- Top management
- Underpinning agreement (UA)
- Underpinning contract (UC)
- User
- Value

A look inside: FitSM-1

- FitSM-1 defines 84 requirements that should be fulfilled by an organisation (or federation) offering IT services to customers.
- Compliance with the 84 requirements can be regarded as a "proof of effectiveness".
- The 84 requirements are structured as follows:
  - 15 general requirements (GR)
  - 69 process-specific requirements (PR)
    - Consideration of 14 IT service management processes

*FitSM is based on a **simple and lightweight ITSM process model**, covering the 14 most important and most common ITSM processes relevant for practical implementation in organisations and federations providing technology-enabled services to their customers*

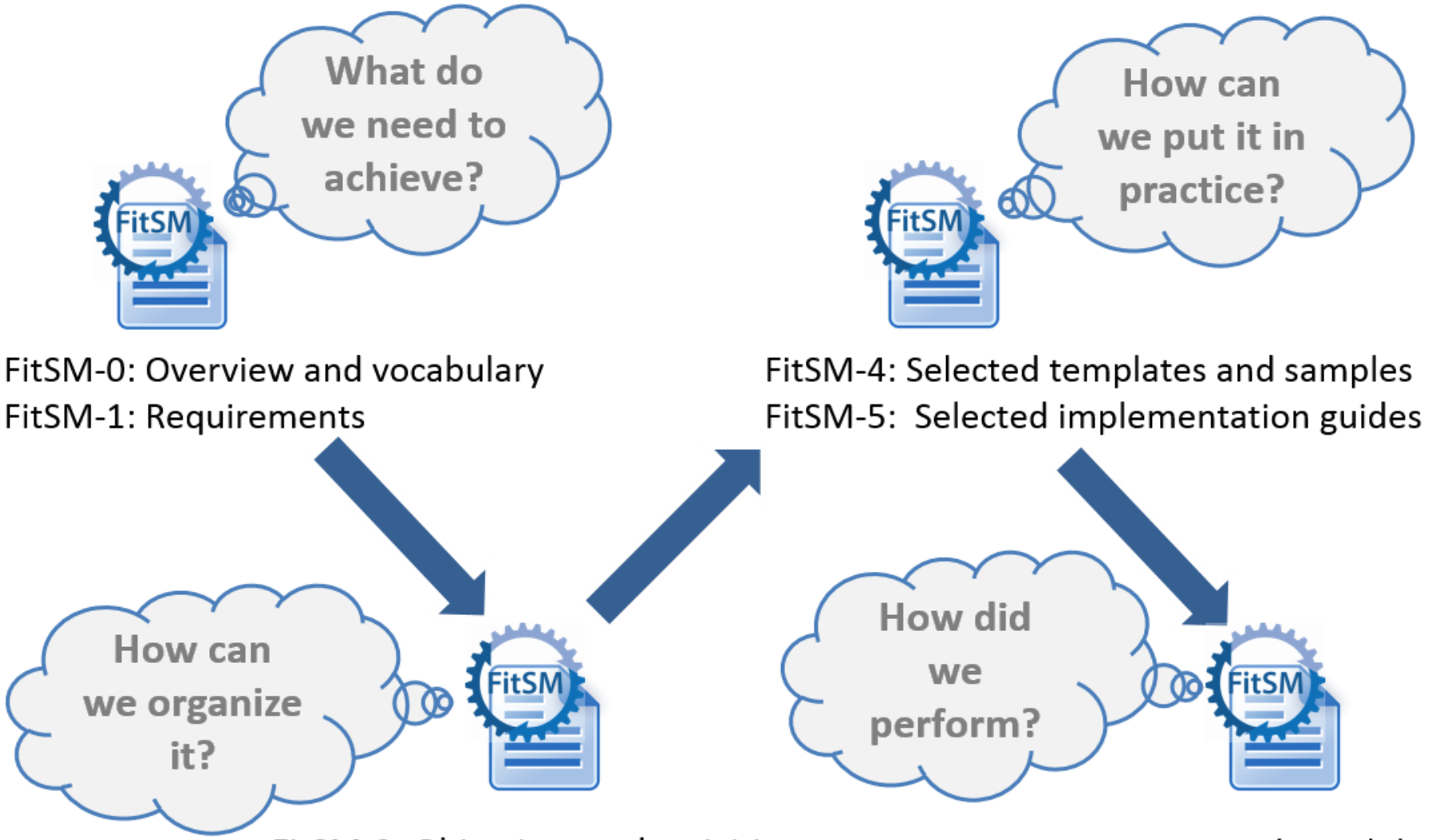
    - Between 3 and 8 requirements per process

- The underlying lightweight process model of FitSM:

ITSM processes for service planning & delivery	ITSM processes for service operation & control
Service Portfolio Management (SPM)	
Service Level Management (SLM)	Incident and Service Request Management (ISRM)
Service Reporting Management (SRM)	Problem Management (PM)
Service Availability and Continuity Management (SACM)	Configuration Management (CONFM)
Capacity Management (CAPM)	Change Management (CHM)
Information Security Management (ISM)	Release and Deployment Management (RDM)
Customer Relationship Management (CRM)	Continual Service Improvement Management (CSI)
Supplier Relationship Management (SUPPM)	

- Examples of FitSM-1 requirements (7 out of 84):
  - PR1.1 A service portfolio shall be maintained. All services shall be specified as part of the service portfolio.
  - PR2.2 For all services delivered to customers, SLAs shall be in place.
  - PR5.4 Performance of services and service components shall be monitored based on monitoring the degree of capacity utilisation and identifying operational warnings and exceptions.
  - PR6.5 Access control, including provisioning of access rights, for information-processing systems and services shall be carried out in a consistent manner.
  - PR7.2 For each customer, there shall be a designated contact responsible for managing the customer relationship and customer satisfaction.
  - PR9.1 All incidents and service requests shall be registered, classified and prioritized in a consistent manner.
  - PR12.5 In making decisions on the acceptance of requests for change, the benefits, risks, potential impact to services and customers and technical feasibility shall be taken into consideration.
  - …

FitSM logic



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Senior Strategy and Policy Officer,
EGI.eu

Introduction: EGI & EGI.eu

- EGI = European Grid Infrastructure
  - Federation of 350 Resource Centres across 50 countries
  - Provides distributed computing and storage resources to accelerate data-intensive research
- EGI.eu = Coordination Body
  - Non-profit foundation based in Amsterdam (~20 staff)
  - 38 members (e.g. NGIs, EIROs) form governing body – EGI Council
- EGI-InSPIRE = EC-funded project
  - Supported the transition to sustainable service provision
  - 4-year project; €25M EC contribution (Dec 2014)
  - EGI-Engage: €8M EC contribution (30 months to start Mar'15)
- EGI.eu Customers:
  - EGI.eu participants: the members of the EGI Council
  - Resource providers: entities that provide computing resources integrated in

The move towards sustainable service provision

2001-2004
EDG
Proof of Concept

2004-2010
EGEE-I/II/III
Research project: From prototype to production

2007-2009
EGI Design Study
Sustainability Model

2010-2014
EGI-InSPIRE
Transition from production towards a sustainable infrastructure

Professional Service Provision

Motivation

- EGI
  - Large federation of service providers
  - Independent organisations with their own services and practices
  - Service management for often tied to the project structure
- Benefits for common approach to federated service management
  - Increase professional service delivery through best practices:
    - Offer better predictability for how services are managed and delivered
    - Enhance user experience with a customer-oriented approach
    - Improve service provision maturity across the federation
  - Provide a framework for thinking about value, customer, service

Service Portfolio defined

- Complex set of internal and external services clarified
- Marketing ‘solutions’ based on it
- Opportunity to discuss value creation

Agreement framework completely refactored

- SLA/OLA harmonization and with appropriate party
- Clarification of expectations
- Templates for what information to be described

Maturity Assessment

- More than 10 years of operations and development, no need to start from scratch, quickly identify focus areas

Technical and operational processes

- Forcing array of technical tools to work together

Certified Training

- Establishing a federation wide culture

FitSM is lightweight and tangible

- Allows to ask the right questions - get started immediately
- Provides pragmatic approaches to solving issues
- Reduces resistance

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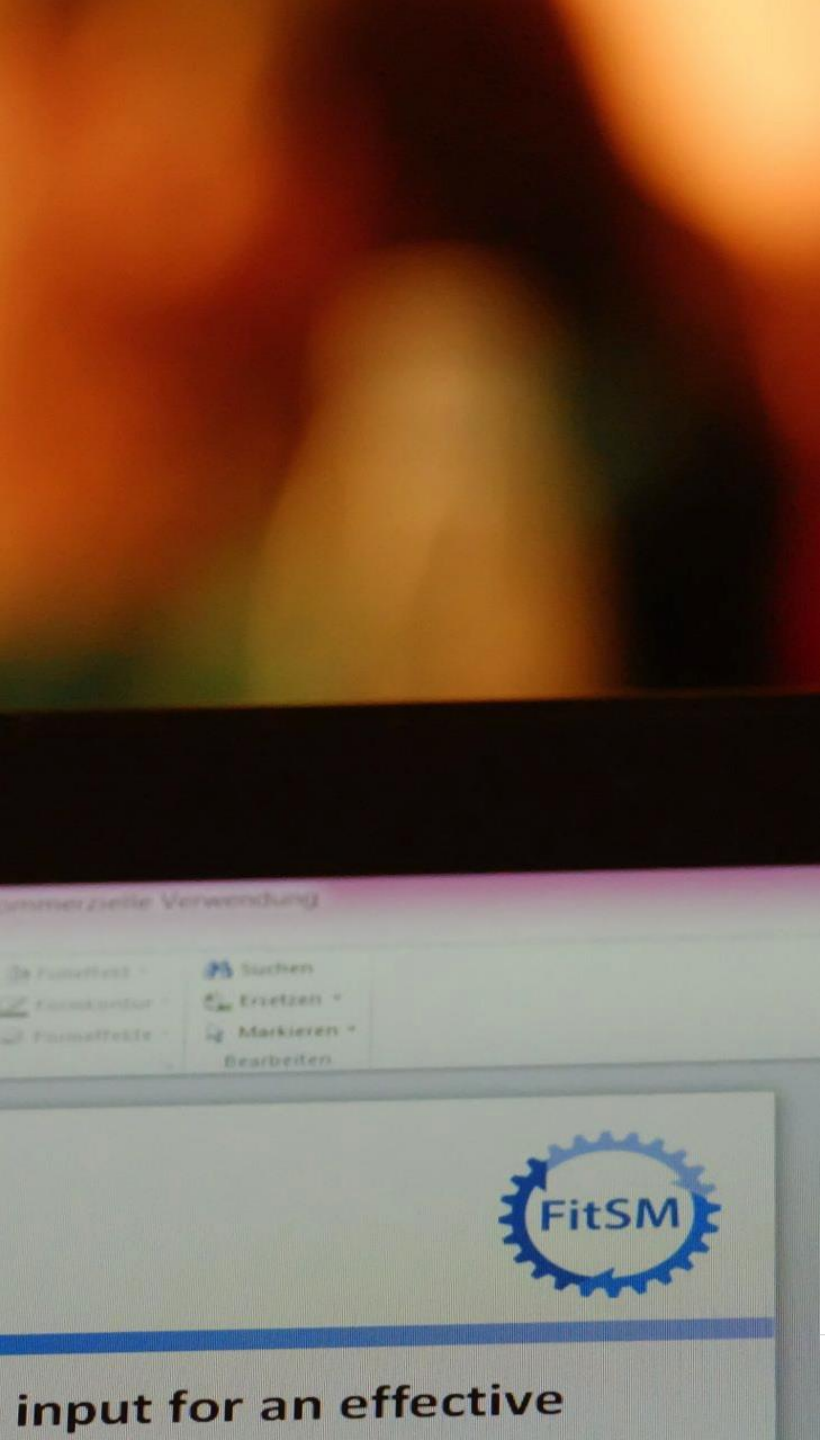
PRACTICAL EXPERIENCE

LEIBNIZ SUPERCOMPUTING CENTRE

European supercomputing centre in Garching near Munich; provider of a diverse set of IT services for Munich Universities, Bavarian academic institutions and scientist worldwide.



Even with relative state of ITSM, some of FitSM proved very useful, especially

- *FitSM-4 Service Portfolio Template*
  - Starting point for SPM (not in ISO/IEC 20000)
  - Easier comparisons with offerings of other academic computing centres
- *FitSM-6 Self Assessment Tool*
  - Easy, very efficient assessment to gain an overview of general capability states across all processes
  - Useful, “top management compatible” graphic representation of results

Open discussion

Send your questions using chat

FitSM Standards for lightweight IT service management

FedSM

www.fitsm.eu

www.cloudwatchhub.eu

CloudWatch

Thank you!

FitSM

Standards for lightweight
IT service management

www.fitsm.eu
info@fitsm.eu
@FitSM_Standard

CloudWatch

www.cloudwatchhub.eu

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