Evaluating & Managing Risks
in a new Integrated Awards Management System

Patrick VINCENT - HFSPO

International Workshop on accountability Challenges

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HUMAN FRONTIER SCIENCE PROGRAM
"HFSP"

➢   <u>Aim of the Program:</u>

This International program aims*" to promote, through international cooperation basic research focused on the elucidation of the sophisticated and complex mechanisms of living organisms and to make the fullest possible utilization of the research results for the benefit of all humankind …"*

➢   <u>Members :</u>

AU(2005), CA, FR, GER, IT, JAP, NOR (2008), NZ (2005),
ROK (2005), Swits, UK, USA, EU

Human Frontier Science Program

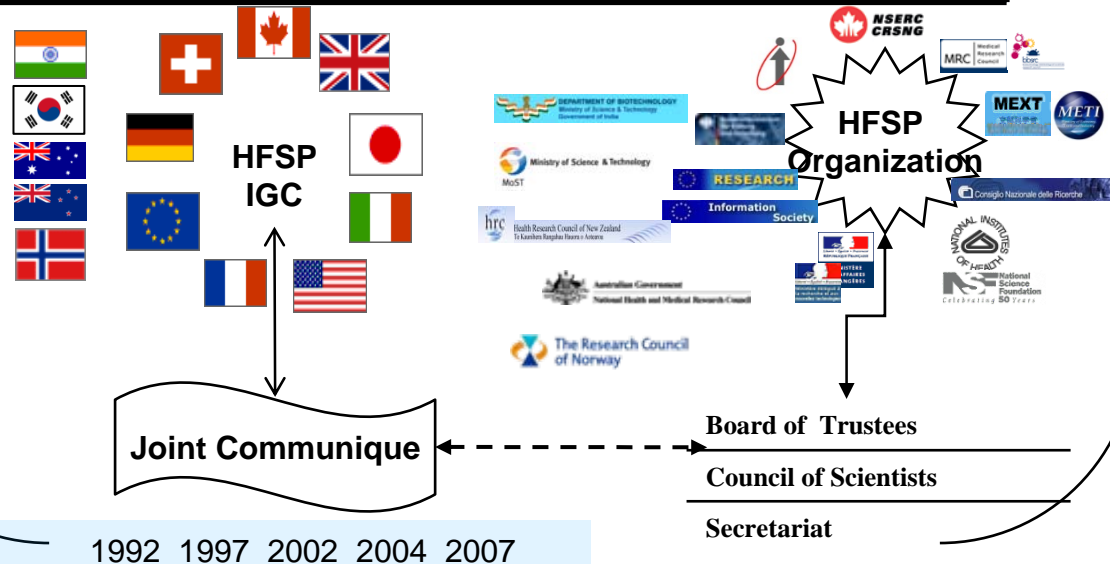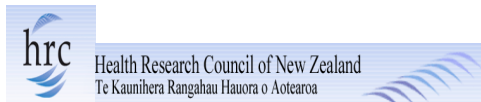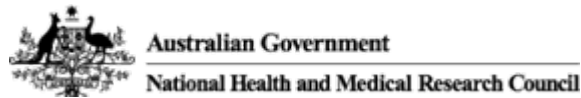|	
Mid 80's	Feasibility study launched by Japanese goverment & scientists
1987	Proposed at the Venice Economic Summit
1989	Program implemented in Strasbourg/France
1990	First grants and fellowships awarded
2009	20th Anniversary

Governance
Structure

Human Frontier Science Program

	HFSP Intergovernmental Conference (IGC)	HFSP Organization
Key role	Strategy Long term plan Membership	Implementation Definition of programs Financial rules Evaluation new Members
Financial role	3 years budgetary plan Total amount Distribution among Members of HFSP council	Decides actual contributions Annual action plan and monitoring

HFSP IGC

HFSP Organization

Joint Communique

Board of Trustees

Council of Scientists

Secretariat

1992 1997 2002 2004 2007

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HFSP Career and Research support

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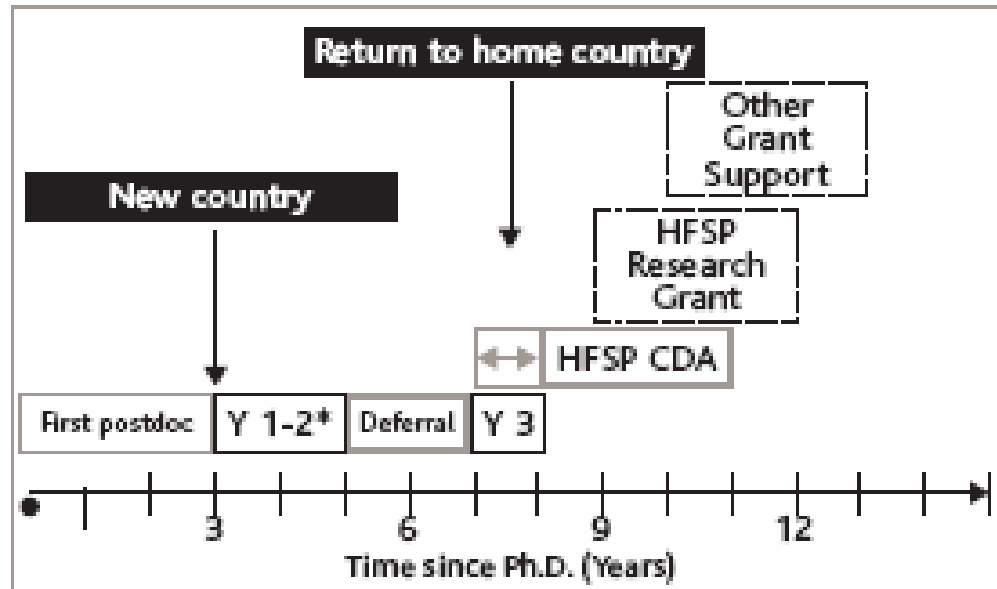
FY 2007 contributions:
58.5 million USD

Joined since 2004

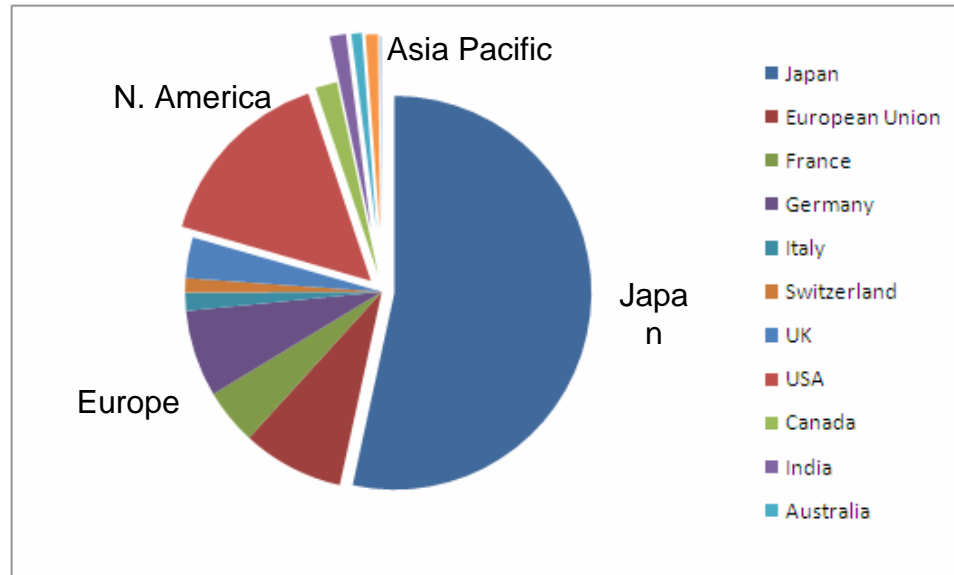| FY 2007	Japan	European Union	France	Germany	Italy	Switzerland	UK	USA	Canada	India	Australia	Korea	New Zealand	TOTAL
million USD	31.25	4.88	2.67	4.17	0.87	0.69	1.96	9	1.04	0.78	0.504	0.59	0.099	**58.50**
% total	53.4%	8.3%	4.6%	7.1%	1.5%	1.2%	3.4%	15.4%	1.8%	1.3%	0.9%	1.0%	0.2%	

Japan 53 %

Europe 26 %

North America 17%

Asia Pacific 3.4 %
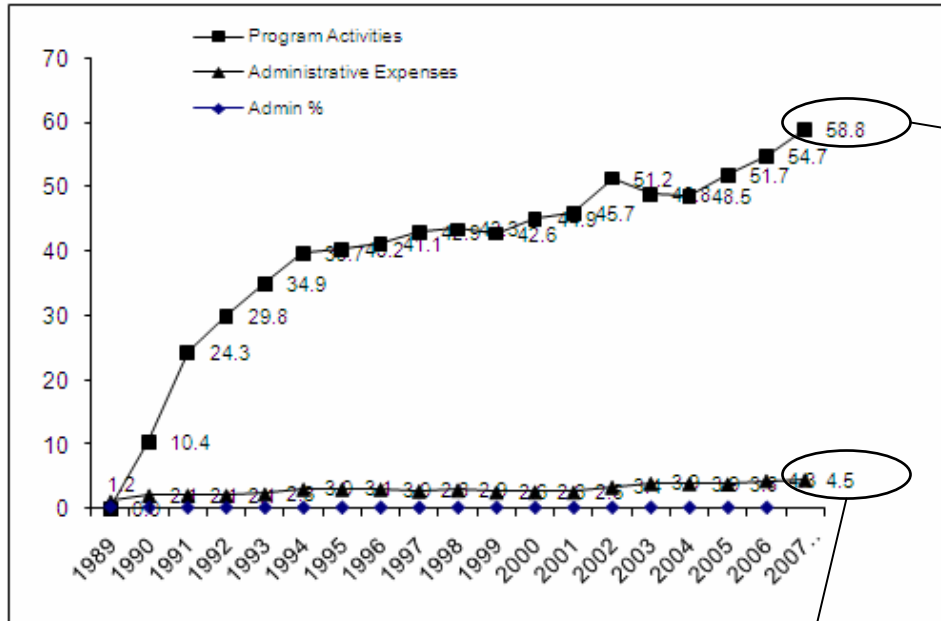

+ financial income ~ 2 million USD

Resources utilization in FY 2007

94 % to program and 6 % to overheads

Million USD

Research Grants	36.55	62.7%
Career Devt Awards	6.18	10.6%
Long Term Fellowship	15.58	26.7%
	58.31	

Short Term Fellowship	0.2
Awardees meeting	0.3

PROGRAM	Award Year	n awards
LT0	2003	90
	2004	90
	2005	101
	2006	93
	2007	100
Total LT		**474**
CDA	2005	18
	2006	29
	2007	24
Total CDA		**71**
RGP	2005	27
	2006	20
	2007	25
Total RGP		**72**
RGY	2005	7
	2006	12
	2007	10
Total RGY		**29**
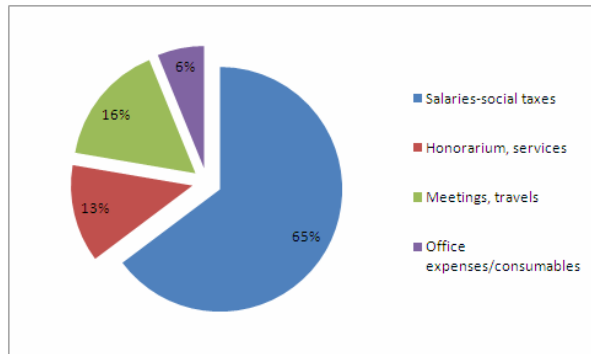
Evaluating & Managing Risks
in a
New Integrated Awards Management System

- Background

- General description

- IT security issues, general and specific

- Solutions

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Description of project

2005   Triggered by an internal audit : dependancy on one technology for key application.

2006   Consultant analysis

Expansion to "ERP"

Public tender

Selection of one global provider

2007/2008   Development and implementation

(infrastructure / F&A / Awards mngt)

2009   "Stabilisation"

General structure before and after change

2002

2001

Applicants/Awardees — Scientific management — F&A management — Banks — Awardees

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1999

2007-2009

Microsoft Office SharePoint — Microsoft Dynamics AX — sage

Applicants/Awardees — Integrated Project application and awards management — Banks — Awardees

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2009
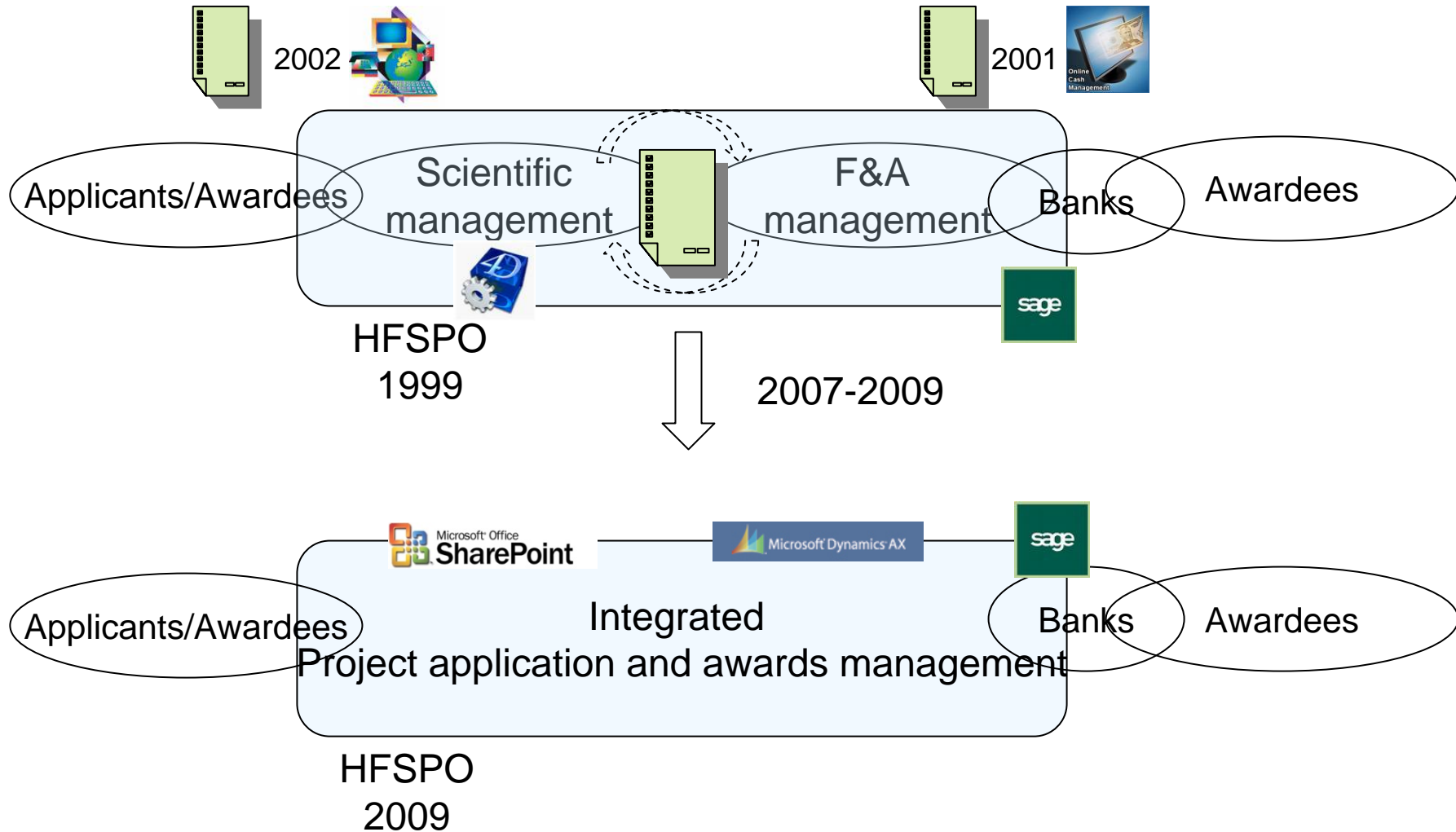
Opportunities and issues

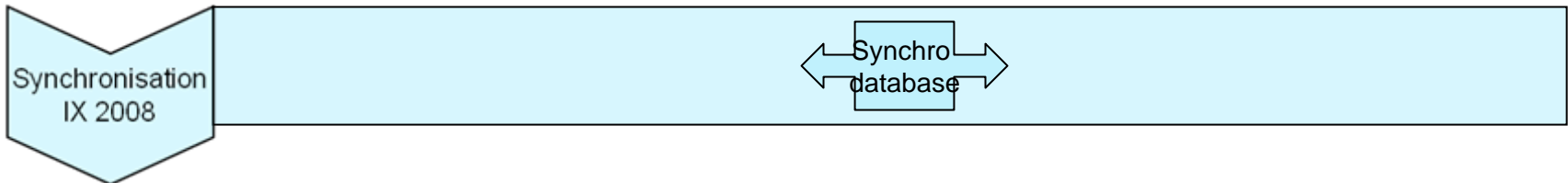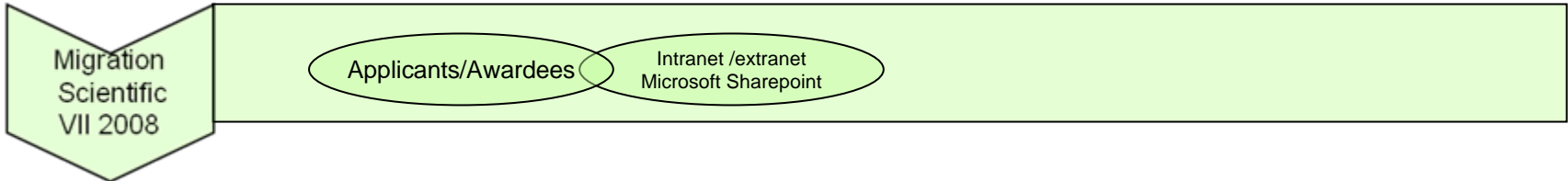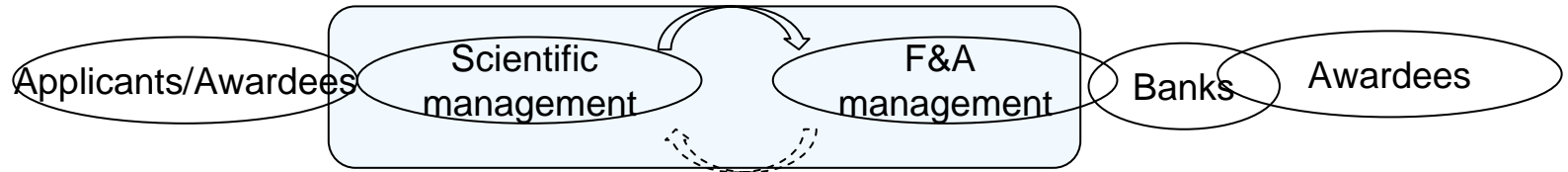**Opportunities**

State of the art technology		
Choice of providers (in principle)		
F&A Management	Awards management	Security and maintenance
Multicurrency Cash accounting to accrual accounting Seamless link with awards mangt Cashflow optimizing	From project based to individual based Greater autonomy from external developers Greater flexibility for users in configuring application interface according to their workflow requirements Opens potential for future developments such as online reporting by awardees	Standard IT environment with alternative developers on the market Data retrieval improved (BI) and controls easier Remote back up Redundancy and resiliency improved ? Maintenance cost down ?

Issues

Critical milestones for launch

High cost of development - maintenance cost uncertain: Return on Investment ?

Systemic risk with multiple entry point, internal and external, and potential access to highly sensitive data (project proposals, bank accounts…): new threat ?

Few supplier s(Service provider and Microsoft)
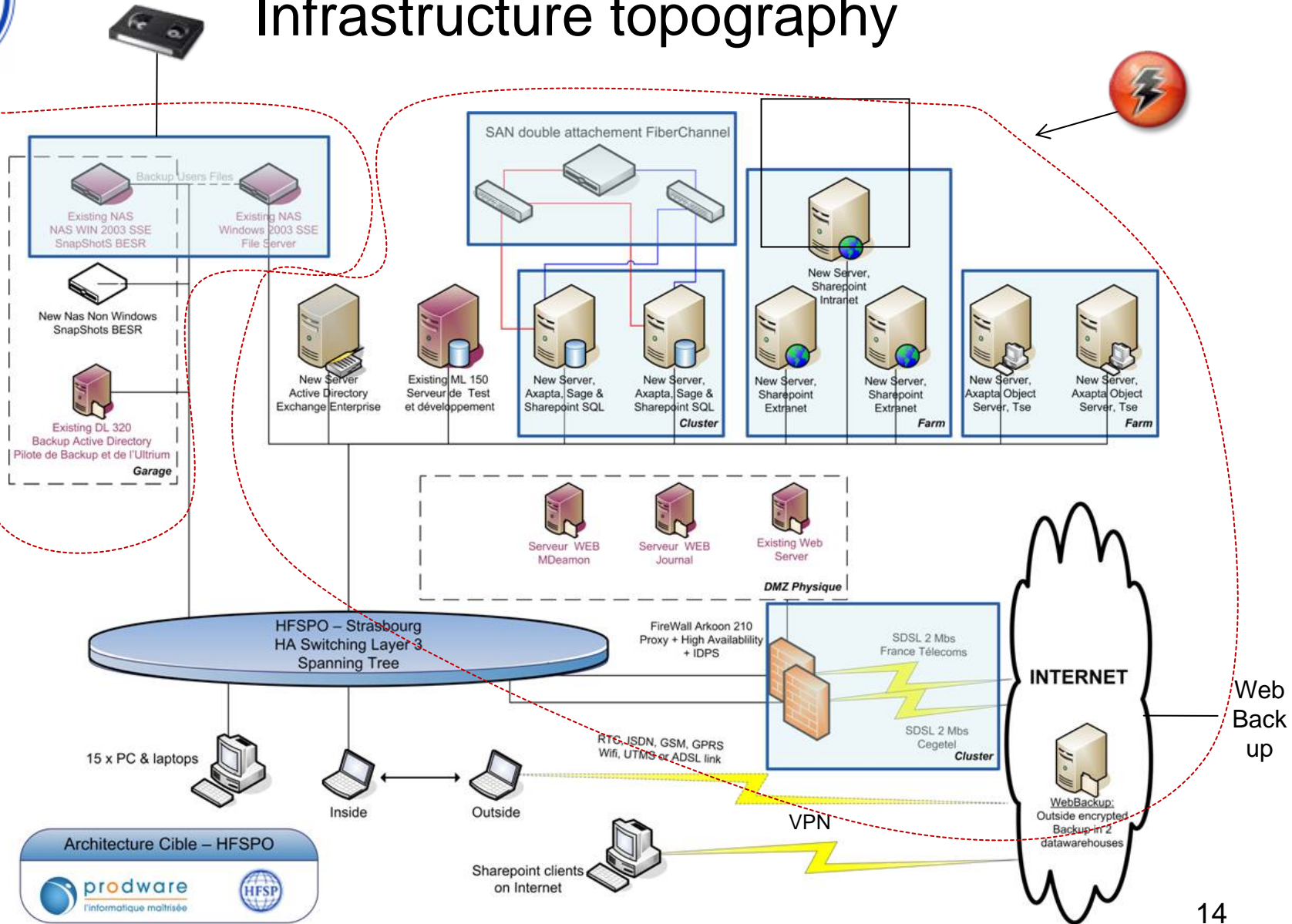
Overconfidence and split responsibility

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Migration milestones

Infrastructure topography

SAN double attachement FiberChannel

Backup Users Files

Existing NAS
NAS WIN 2003 SSE
SnapShotS BESR

Existing NAS
Windows 2003 SSE
File Server

New Nas Non Windows
SnapShots BESR

Existing DL 320
Backup Active Directory
Pilote de Backup et de l'Ultrium

Garage

New Server
Active Directory
Exchange Enterprise

Existing ML 150
Serveur de Test
et développement

New Server,
Axapta, Sage &
Sharepoint SQL

New Server,
Axapta, Sage &
Sharepoint SQL

Cluster

New Server,
Sharepoint
Intranet

New Server,
Sharepoint
Extranet

New Server,
Sharepoint
Extranet

Farm

New Server,
Axapta Object
Server, Tse

New Server,
Axapta Object
Server, Tse

Farm

Serveur WEB
MDeamon

Serveur WEB
Journal

Existing Web
Server

DMZ Physique

HFSPO – Strasbourg
HA Switching Layer 3
Spanning Tree

FireWall Arkoon 210
Proxy + High Availablility
+ IDPS

SDSL 2 Mbs
France Télecoms

INTERNET

SDSL 2 Mbs
Cegetel
Cluster

Web
Back
up

15 x PC & laptops

Inside

Outside

RTC, ISDN, GSM, GPRS
Wifi, UTMS or ADSL link

VPN

WebBackup:
Outside encrypted
Backup in 2
datawarehouses

Architecture Cible – HFSPO

prodware
l'informatique maîtrisée

HFSP

Sharepoint clients
on Internet

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Maintenance and support

- ## IT Manager
  - Main responsibilities:
    - preventative and curative support of infrastructure with provider
    - Bugs reporting/prioritization and solution monitoring
    - Quality control report

- ## Service provider
  - Development and maintenance infrastructure
  - Development and maintenance application
  - Remote back up

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The Security question

- Audit/diagnostic
    - "Surrounding the perimeter"
    - Protecting key information
    - Ensuring continuity of exploitation
    - Accounting for the Human factor

- Challenge and test

- Maintenance/update

- 24/7

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Environment

- Human environment:
  - Security charter
  - "Social engineering"
  - Phishing

- Physical environment
  - Fire
  - Water
  - Power
  - Access
  - Back up - archives

Protect access to data

- **Identification users**
  - Login / password
  - Biometric

- **Wi-Fi authentification protocole WAP**

- **File security**
  - File sharing and access rights management
  - Encryption
  - Activity loggers

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Protect applications

- ## Access filter
  - fire wall, DMZ
  - Antivirus, spam filter (a source of problems)

- ## Protection web and SQL servers
  - From extranet and intranet threats

A balance between protection and convenience

Maintenance of operating systems and softwares

- Update Windows operating systems: critical

- Update applications
  challenge in an integrated environment: the "test server".

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Internet communication

- Secured communication (SSL)
- VPN
- Certificate
- Particular issue of remote development and maintenance

Challenging and testing protections

Brute force

and

Brain

Specific consideration about outsourcing

- Access rights – staff turnover at providers level

- Remote maintenance and development: communication protocole – administrators rights – hotline

- Back up

- Cost vs in house

- Importance of documentation and regular scouting of alternative providers

- Dependancy on strategic matter – Ownership

- KPI

- Play cooperative but also hard ball when necessary

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Conclusion on IT Project

Very significant benefits expected: sustainability, continuity of exploitation, resources optimising, accountability, evolution.

Change management

Project governance is key (the "nice to have" !), as well as keep providers accountable: "what is not on paper has not been said".

Return on Investment: relevant metrics and benchmarking ?

"An IT project can be late and finished, on time and unfinished, or within budget. At most, one can have two out of three, but an IT project that is complete, on budget, and delivered on time is almost unheard of"

Conclusion on IT Security

Higher vulnerability as a trade-off for more sophistication and complexity ?

Delicate education and awareness of human factor as a source of risk

How much is real and how much is overblown ?

Sharing experience with peers is difficult .

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THANK YOU FOR YOUR ATTENTION

and I look forward hearing …

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