



# Administrative Systems and Institutional Infrastructure



*Some Key Considerations for ICT System*

# ICT Systems - Key Issues

- Why ICT?
- Stakeholders
- Gaining Support
- Institutional Responsibility
- Institutional Capacity
- Business Operations Model
- Organizational Architecture
- ICT Function
- HR Function
- Environmental Support Issues



# Are We Sure?

- Reason(s) for system should be **defined**
- Scope should be **crystal clear and realistic**
- Estimated impact should be **assessed**
- Gains should be **clear and quantifiable**
- Development cost justified & underpinned by **details**
- Cost of on-going operation & maintenance should be **calculated**



# Stakeholders

- Identify stakeholders and involve them
- Does system require inter-institutional support (e.g. unified collection of tax & contributions)?
- Where will database be managed? (e.g. Ministry vs Executive Agency)
- Who will access database?
- Who is owner of the data?



# Gaining Support

- ❑ Political support necessary?
- ❑ Support from top management is **VITAL**
- ❑ Understanding & involvement from middle management - **CRITICAL**
  - Advantages for middle management must be sold
  - Why change – the case should be watertight
  - Who wins – and why (who loses?)



# Homework First.....

## □ Institutional Impact Assessment

- Align with Strategic Operations Plan
- Assess impact on Governance System
- (Re)Define Business Operations Model
- (Re)Define Organisation Architecture
- (Re)Define Service Delivery Model



# Homework First.....

## □ Institutional Impact Assessment (*contd.*)

- Agree Resources (human, technical and financial)  
– for new Business Operations Model
- Develop Risk Plan – impact on existing services during development
- Existing ICT systems – cost implications for cessation?
- Existing ICT contracts with suppliers – cost implications?



# ICT Function > *Organization Structure*

- ❑ ICT often at wrong level in institution
- ❑ Re-position – at strategic level
- ❑ Implications for ICT function
  - integration with strategic management team
  - increase scope of responsibilities > new systems
  - re-organisation of ICT function
  - new management needed in ICT function?
  - new staff
  - up-skilling





# Human Resources - *Impact*

- Audit of ICT and business skills analysis required
- Recruit new ICT staff or up-skill existing staff?
- Can ICT personnel (with the new skills required by a project) be fitted into existing grade & pay structures?
- Is outsourcing required? Where?



# Human Resources - *Impact*

- Recruitment – special methodology needed for ICT specialists?
- Training and Development - new requirements, new specialisms
- Who trains? Where is training available?
- Budget – extra staff, training/up-skilling



# Human Resources - *Impact*

- Project Management
  - In-house capacity?
  - Contract in?
- Project Team capacity (training?)
- Contract in project team members?
- Project Management software & resources



# Environmental Support - *External*

- Communications infrastructure?
- ISP providers?
- Technology environment – can it support technology choice?
- Where will ICT experts be recruited from?  
(universities, technical institutes etc.)
- Role of external consultants



# Environmental Support - *Internal*

- Physical infrastructure to accommodate ICT adequate?
- Reliable electricity supply?
- Backup system – different location?
- Fire, water, theft and other hazards?
- Data Center? Cost?
- Paper archive? Migration
- Fall-back administration system?
- Legacy system – keep or phase out?



# Some Technical Considerations

- Chosen technology must be sustainable and affordable
- Chosen technology must be adaptable
- Enable de-linkage of back-office processing from front-office service delivery
- Keep data (and data validation rules & procedures) separate from regulation and business rules and from business data validation logic
- Keep related functions modular – to enable amendments to be undertaken with minimum impact on related process software
- Combine similar functions across various benefit types – single registration module, single database update module etc.

