NATIONAL DOSE REGISTER PROJECT STATUS

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Contents

- Background
- Project Implementation
- Design and Customisation
- Testing
- Remaining Milestones

International Basis

GSR Part 3: Requirement 25, paragraphs 4.63 and 4.64

- Regulatory Body makes provision for establishing and maintaining records of occupational doses
- The regulatory body may or may not be the sole entity responsible for the maintenance of these registers and inventories
- Regulatory Body involved in their proper retention and use
- Authorized parties responsible to keep their own records

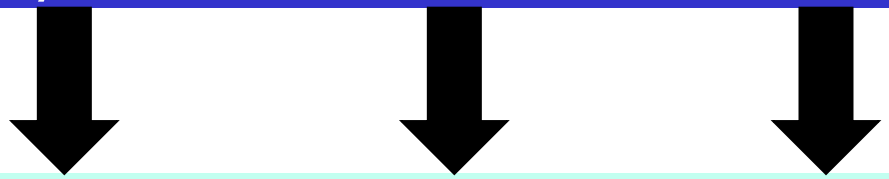
European Union BSS

Results of individual monitoring submitted to a NDR established by each EU Member State

Other Countries establishing and maintaining National Dose Register

National Situational Analysis

- Joint Coordination Committee, NNR-DOH Working Group
- 2007 meeting with DSP's (host of NDR, legislation)
- Working Group Study after Regulatory Self Assessment
- Proposal with International practice, available databases, location, RDR
- Accepted by the JCC, NNR Board, meeting with DPs in 2012
- Approved by IAEA and included in National Project

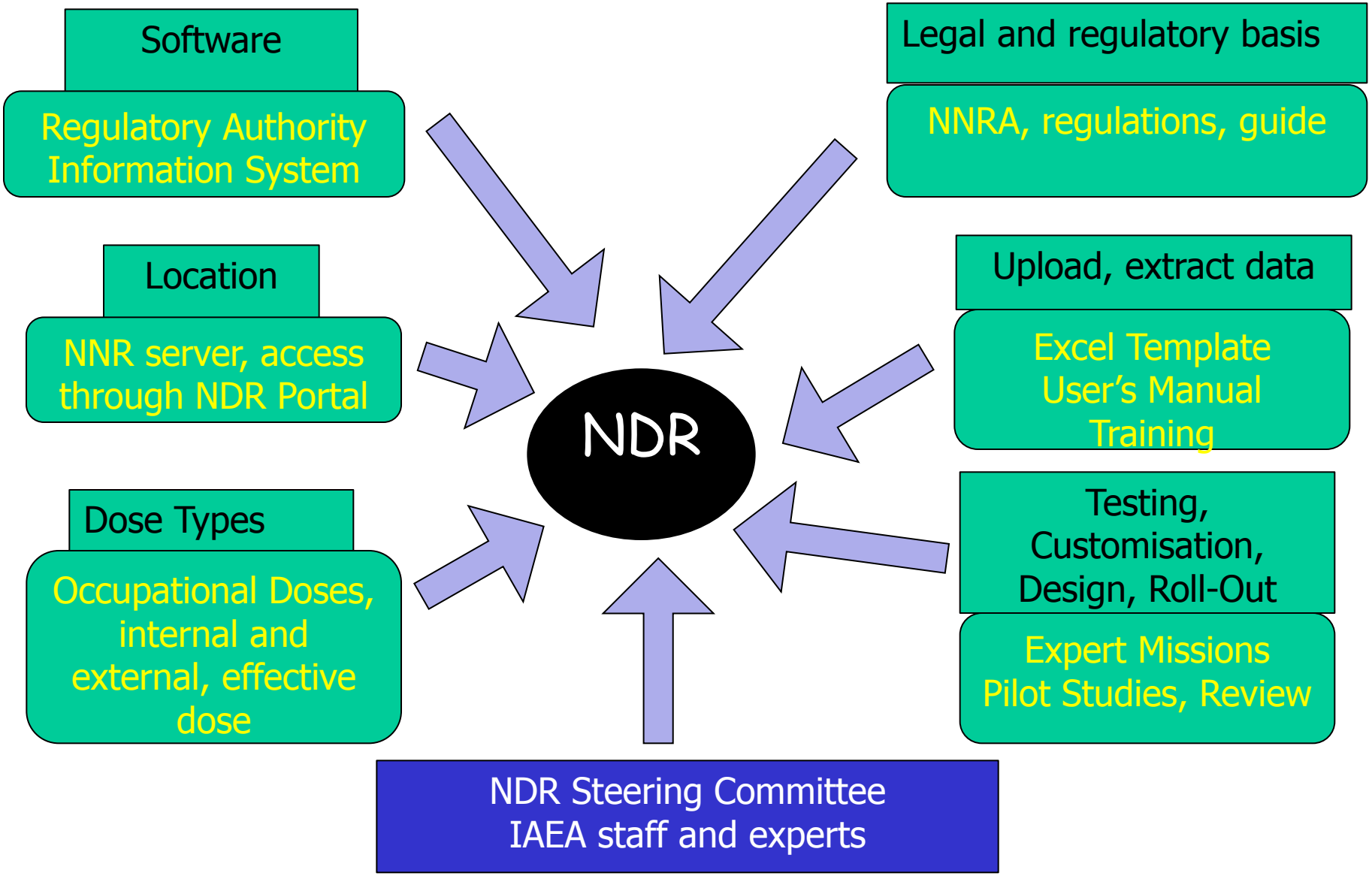


- No explicit legislative requirement for NDR
- No central registry for occupational radiation doses
- No real harmonisation of records and reporting systems
- SSRP requirement for each authorization holder
- Draft Regulations for Nuclear Industry

Benefits of NDR

- Integrated system of occupational records
- Confidence in record keeping process
- Evaluation of dose trends and statistics
- Reporting purposes, e.g. annual reports, UNSCEAR
- Health research and epidemiological studies
- Providing dose histories for work planning
- Compliance with related dose limits
- Compensation and litigation cases

NDR project

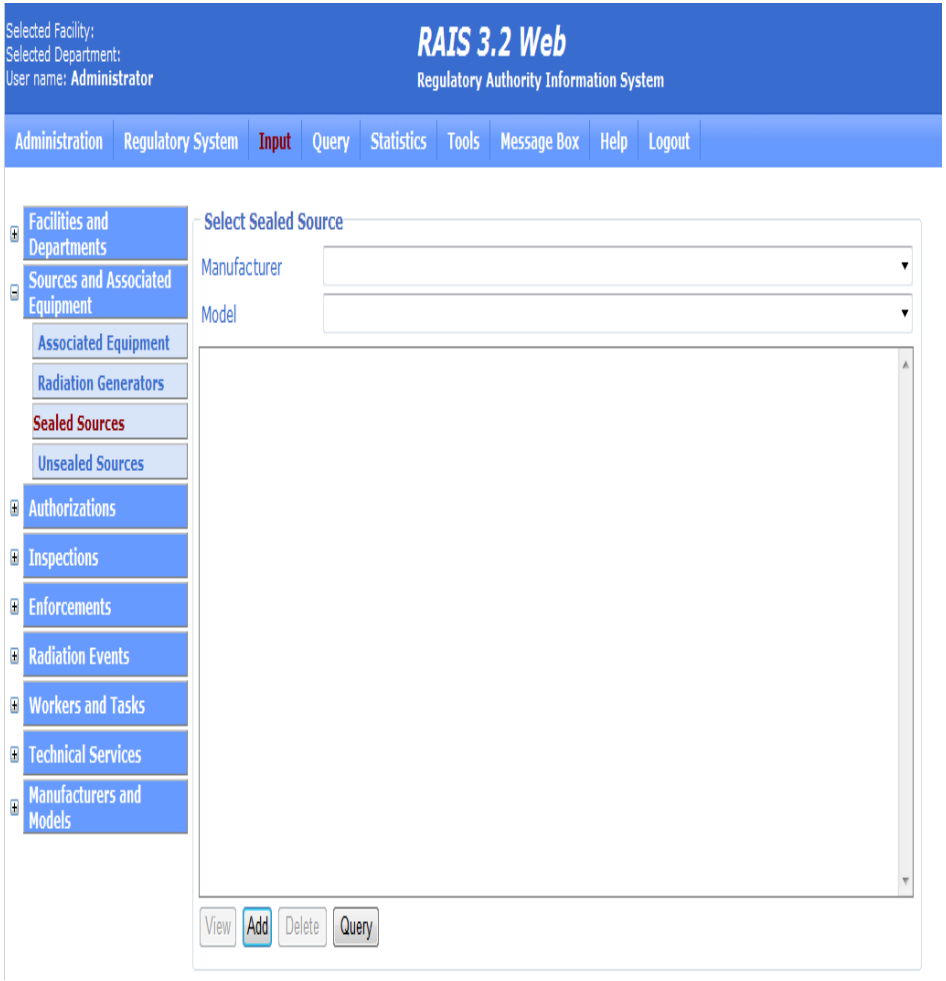

Software
Regulatory Authority Information System
Legal and regulatory basis
NNRA, regulations, guide
Location
NNR server, access through NDR Portal
Upload, extract data
Excel Template
User's Manual
Training
NDR
Dose Types
Occupational Doses, internal and external, effective dose
Testing, Customisation, Design, Roll-Out
Expert Missions
Pilot Studies, Review
NDR Steering Committee
IAEA staff and experts

Regulatory Authority Information System

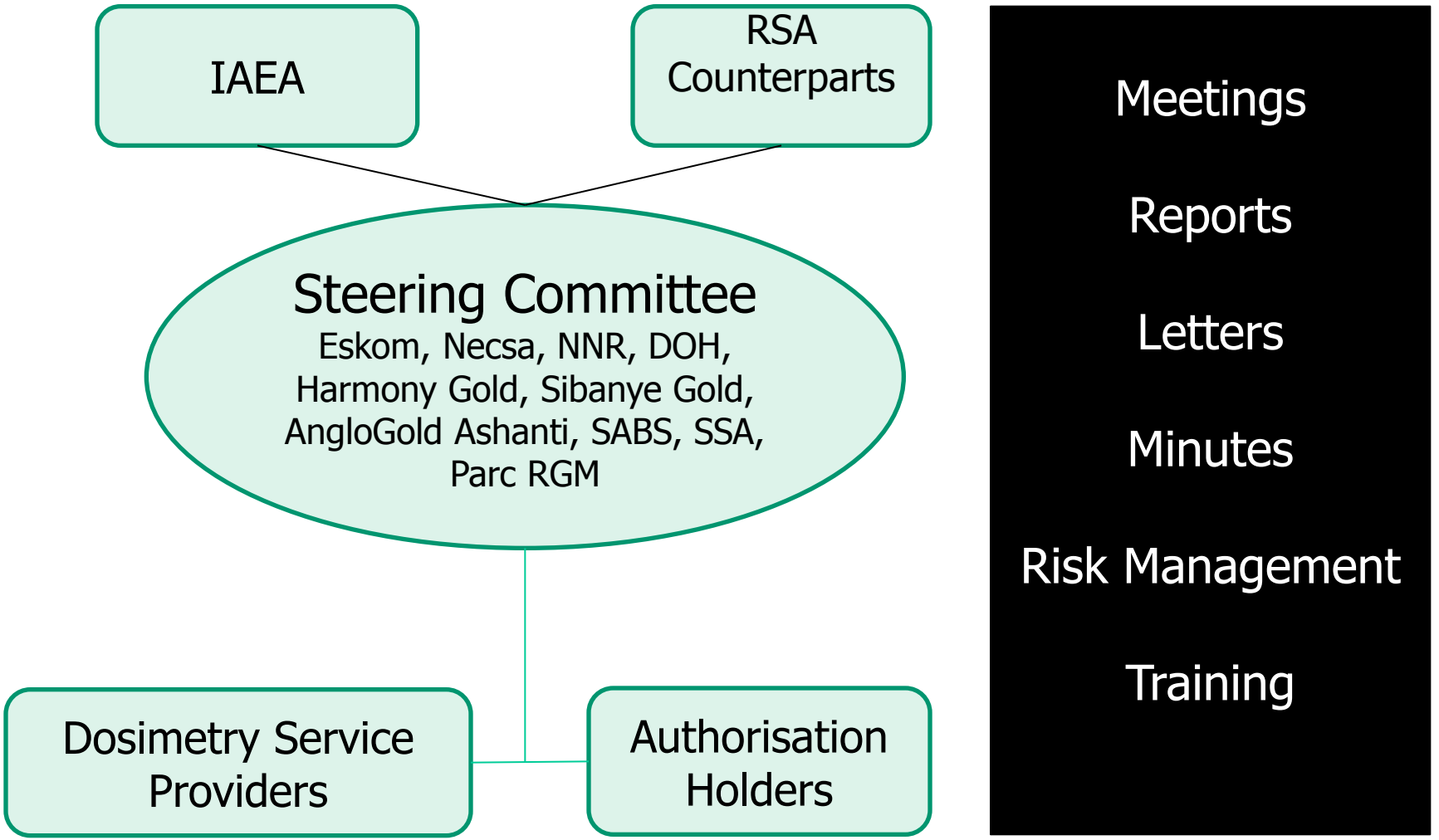
Infrastructure information

Facilities
Radiation sources, equipment
Authorization
Inspection
Enforcement
Workers

Additional items
Radiation events,
Occupational exposure
Technical services

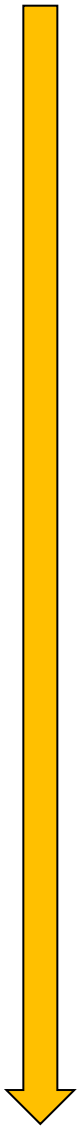


Project Management Structure

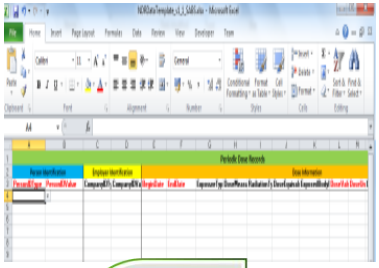


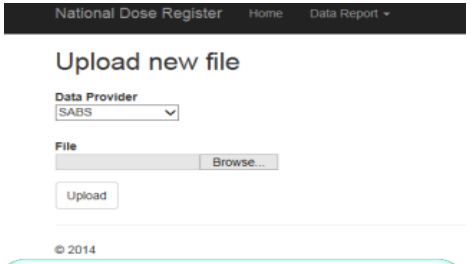
Project Phases

IAEA EM1	• Feasibility Study by IAEA	Aug 2012
IAEA EM2	• NDR Designed in RAIS • Data Transfer Template designed • Training and Pilot 1 Kick-off	Apr 2014
IAEA EM3	• Pilot 1 feedback • Customisation of Template • User's Manual	Dec 2014
IAEA EM4	• Pilot 2 feedback • Finalisation of Template, User's Manual and new Test-NDR • Training to stakeholders • Legal provisions in place	Dec 2015
Readiness	• Pilot 3 implementation • Training to stakeholders • RG-0017 approved • Production-NDR finalised, Directives issued • Roll-out of NDR	Mar 2016



Data Transfer and Upload





NNR file upload Web App

Specific folder on server

File pickup

Automatic periodic process

XML

RAIS Database

Data Transfer Template

- Regulatory Authority Number (RAN), token
- Company Name, ID Type, COR #
- Worker Name, Initials, Identification (ID, Passport, Industry Number, SABS number)
- Worker Status and Activities
- Effective Dose, Period Begin/End, Exposure Type
- Additional Dose Information (Radiation Type, Dosimeter Type, Body Part, Corrected Dose)
- Reference List (Country Name, Practice Code)
- NDR User's Manual specifies process

Upload of Data

- 1 master account per Data Provider (DP)
- Responsible for subaccounts, accuracy of data
- Dose upload in line with authorisation conditions
- DPs responsible/liable for confidentiality, consent and control (internal policy)
- Worker consent form kept in medical file, once off consent
- Printable auditable trail / report
- Upload of all available historical data
- NNR holders upload all dose data (also sources)
- SABS exclude all data for NNR holders

Report Types

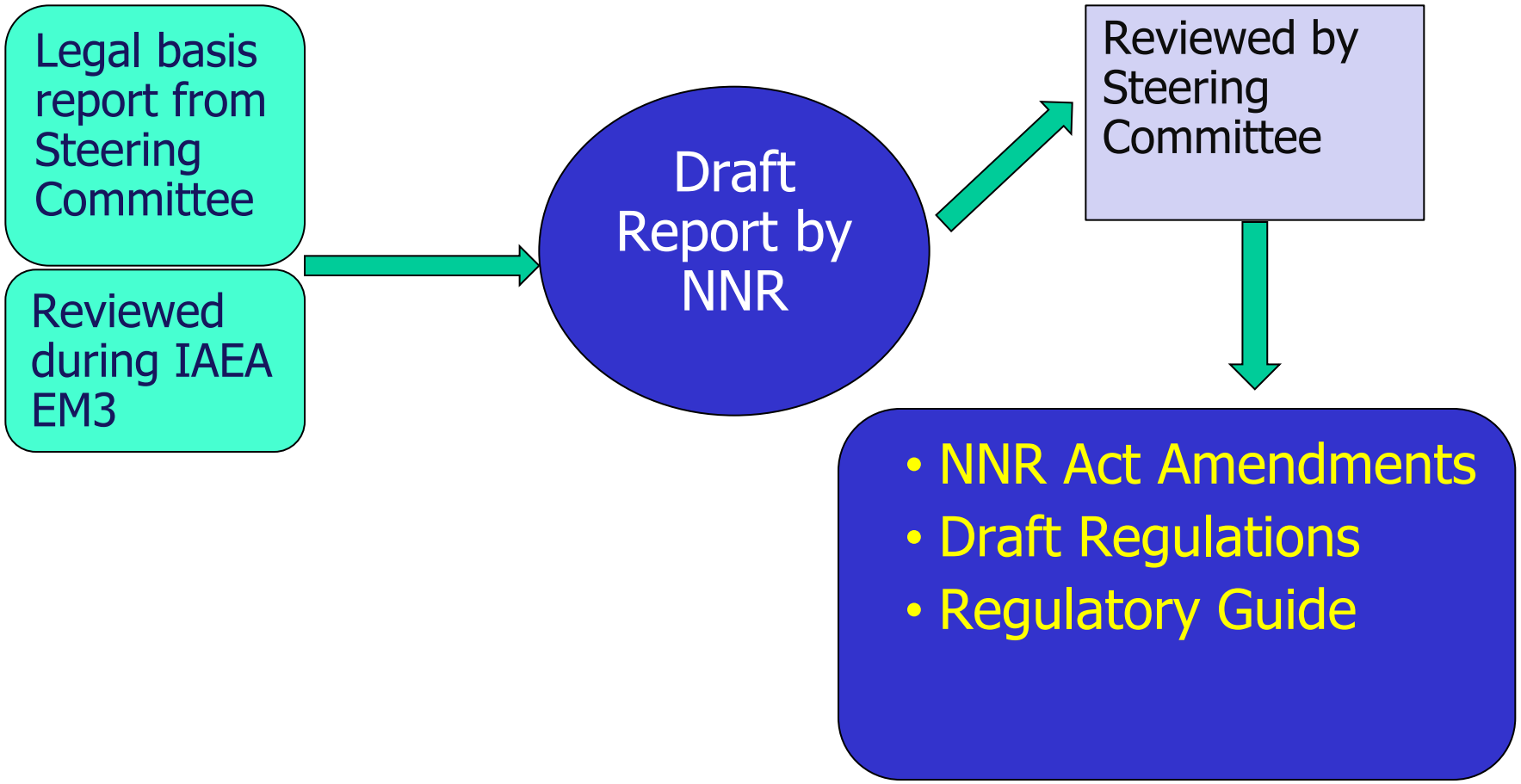
Data Providers

- Total Dose all pathways
- Calendar Year Dose
- Year to Date Dose
- 5 year block

Regulatory

- Average Annual Effective Dose for all workers regulated by NNR
- Annual Collective Effective Dose for all workers regulated by NNR
- Number of workers exposed at different levels e.g. <0.1, 0.1-5, 5-10, 10-15 and 15-20 and 20-50, > 50 mSv/a
- Max individual dose for each sector

NDR Legislation and Standards



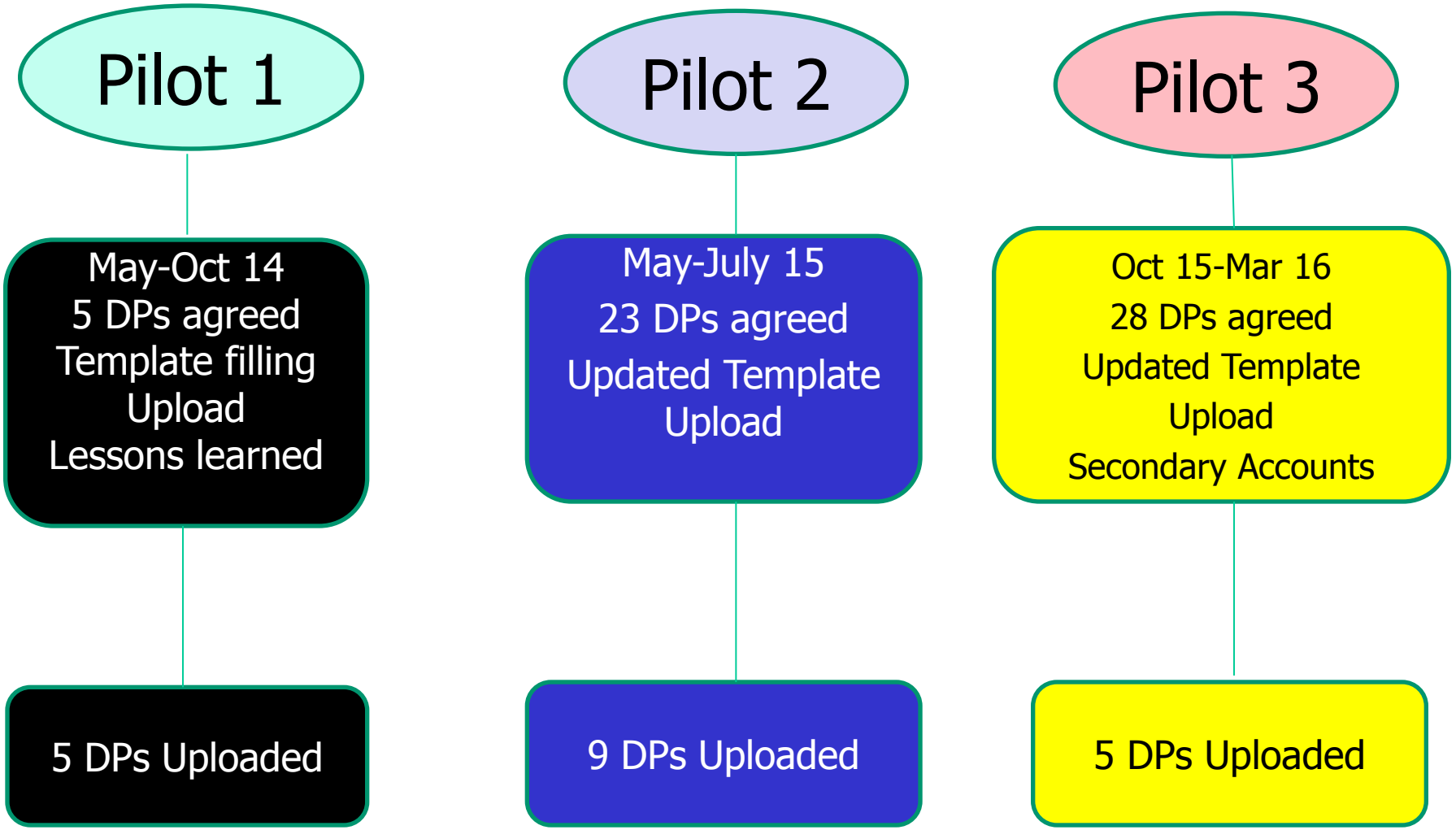
ICT Strategy

- NDR Test and Production NDR
- SQL Standard for Production NDR
- Capacity, Security of NDR
- Backing up and Archiving of Data
- Reports, checks to ensure accuracy of data
- IT and Administrator Manual

Training of NNR staff on RAIS, SQL etc.

Support to Data Providers with access, uploads

Testing of NDR



SC and EM4 outcomes

- Practice first before allowed to use Production NDR
- Test NDR active throughout
- Directives to upload data in interim
- Template v1.5 changes relate to mandatory practice codes, ID, gender, nationality
- 1st upload on Production NDR end of April 2016
- 5y effective dose block by end of April 2016
- Historical doses detailed fields later
- Frequent reminder to upload data
- Email address for all NDR issues (contact us) and help function (Manual)
- NDR Refresher sessions

Remaining Milestones

Feb 16	Training, involve more NORM Directives issued
Mar 16	end of 3rd Pilot Study Production NDR finalised RG-0017 finalised
April 16	Roll out of NDR Data uploads
Jun 16	Handover of NDR