E-vote 2011

5.1 Reporting

MINISTRY OF LOCAL GOVERNMENT
AND REGIONAL DEVELOPMENT

Case no:
Version:
Date: 10/9/2009

E-vote 2011

Use case specification: 5.1 Reporting

Project: E-vote 2011

NORWEGIAN MINISTRY OF LOCAL GOVERNMENT
AND REGIONAL DEVELOPMENT

The E-vote 2011-project

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CONTENT

1. Executive Summary

The system must have a 'report design module' which allows authorized individuals to design, edit and delete reports. The 'report design module' shall provide alternate modes so that the user can choose whether to work in visual mode or directly in the query language. Reports may be designed at any phase in the process (Prior to, during and after an election/referendum,) and for all kinds of data within the system (System data, election results etc.).

The Electoral Committee must be able to open a reporting module, find and select reports from any election/referendum, run these reports and manipulate the results in terms of filtering, sorting and grouping of data. The system must present functionality for export of report results (SSB) and functionality for saving report results to the system or locally on a PC in various formats (XML, EML, format required for the production of ballot papers, formats required for publishing information on public portals etc.). The system shall also have functionality for saving the reports to a location where they can be downloaded by authorized individuals (For printing).

The system must be able to produce reports of the records of Elections (§10-7 'Representation of the People Act'). For further details, see send out 2 (AS – IS Process Models & Preliminary functional requirements TO - BE, chapter 4) and send out 3 (Functional specification TO-BE and Preliminary functional requirements, chapter 2.5). Further requirements for the records are detailed in chapter 9 in regulations relating to parliamentary and local government elections (Representation of the People Regulations).

2. Purpose

Authorized individuals must be able to design reports required by the law §10-7 and on demand. The Electoral Committee must be able to run these reports and use the results for data validation, export to SSB, production of ballots etc.

3. Actors

Actor	Description
ES	The Election system

4. Pre-Conditions

ID	Description	Comments
5.1.1	Data is available in the system	

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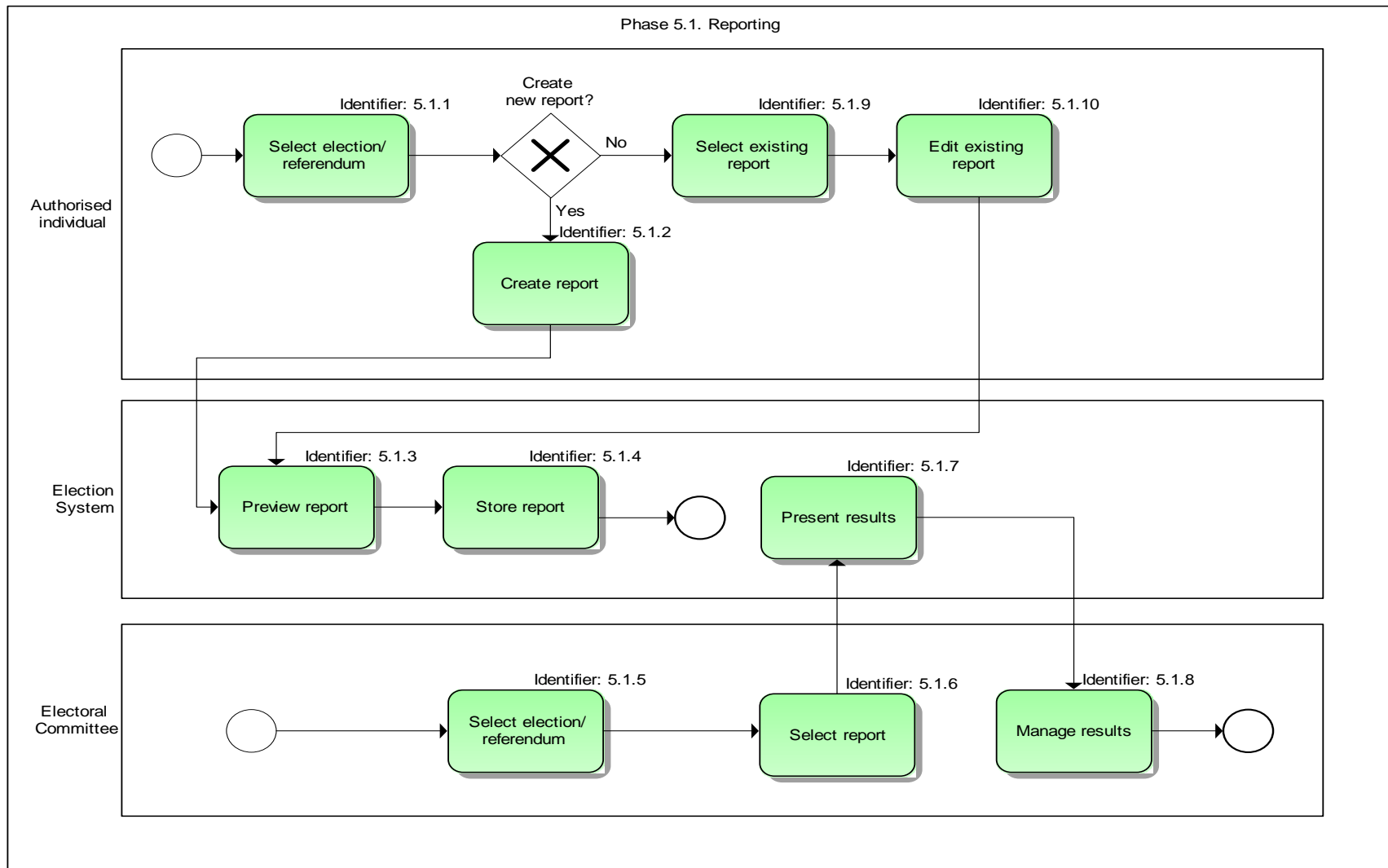## 5. Post-Conditions

ID	Description	Comments
5.1.2	Reports are designed and stored in the system	
5.1.3	Report results are stored in the system	

6. Trigger

The need for creating new reports or extract reports.

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7. Main flows – Functional Requirements

Phase 5.1. Reporting

Authorised individual

Identifier: 5.1.1
Select election/ referendum

Create new report?

No

Yes
Identifier: 5.1.2
Create report

Identifier: 5.1.9
Select existing report

Identifier: 5.1.10
Edit existing report

Election System

Identifier: 5.1.3
Preview report

Identifier: 5.1.4
Store report

Identifier: 5.1.7
Present results

Electoral Committee

Identifier: 5.1.5
Select election/ referendum

Identifier: 5.1.6
Select report

Identifier: 5.1.8
Manage results

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7.1.   Main flow 1 – Create/edit report

ID	Actor	Function (Requirement)	Requirement description	Ref
F 5.1.1	AI	Select election/referendum	The designer must be able to find and select the election/referendum he/she wants to edit or create a new report for.	A1
F 5.1.2	AI	Create report	The designer must be able to create and configure a new report. The 'report design module' shall provide alternate modes so that the user can choose whether to work in visual mode or directly in the query language. No reports shall be hard coded. Report creation shall not be restricted only to developers. The designer must be able to configure a report to run at any time and date during an election/referendum.	
F 5.1.3	ES	Preview report	The system presents a preview of the report	
F 5.1.4	ES	Store report	The report is stored in the system	

7.1.   Main flow 2 – Run report

ID	Actor	Function (Requirement)	Requirement description	Ref
F 5.1.5	EC	Select election/referendum	The Electoral Committee must be able to find and select the election/referendum they want to extract a report from.	
F 5.1.6	EC	Select report	The Electoral Committee must be able to find and select the report (Election results or system data) they wish to run.	
F 5.1.7	ES	Present results	The system shall present results to the user.	
F 5.1.8	EC	Manage results	The Electoral Committee must be able to manipulate (sort, filter and group) the report results. The Electoral Committee must be able to save the report results (election results, system data, ballots, polling cards etc.) either in the system or on a local machine as in various formats: 1. CSV 2. HTML 3. XML 4. EML 5. PDF	

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| | | | | 6. RTF
7. ODF
8. OOXML
9. Image formats (BMP, GIF, JPEG, PNG, TIFF, EMF)
10. Formats required for:
    a. The production of ballots based on approved list proposals. Ballots must be created in a format that can be read by the ICR
    b. The production of polling cards based on data in the Electoral Roll. The polling card shall have a barcode.
11. Commonly used publishing formats which makes it easy to publish system data (list proposals) and election results to public portals (e.g. www.valgresultat.no)

The Electoral Committee must be able to save system data or results to a location where they can be downloaded by authorized individuals for production.

The Electoral Committee must be able to e-mail a report as an attachment in any of the formats specified.

The Electoral Committee must be able to export results to SSB – see 'Use Case 4.1 Reporting of results to SSB'.

The system must facilitate functionality for approval of reports (e.g Election Protocol). | |

7.2.   Alternate flow 1 – Edit existing report (A1)

ID	Actor	Function (Requirement)	Requirement description
F 5.1.9	AI	Select existing report	The designer must be able to choose from existing reports
F 5.1.10	AI	Edit existing report	The designer must be able to edit existing report.

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8. Non-functional Requirements

8.1.   Accessibility and usability

ID	Requirement description
5.1.4	See 'Accessibility and usability requirements'

8.2.   Security

ID	Requirement description

8.3.   Rules & Regulations

ID	Requirement description
5.1.5	The system shall prevent the creation of reports where there are less than 100 votes. If there are less than 100 e-votes they have to be merged together with p-votes before reporting from a specific constituency is possible. This will be the same rules as for p-votes with de-central and centralized counting (with reference to the Election Act § 10-4). http://www.regjeringen.no/upload/KRD/Kampanjer/valgportal/Regelverk/Representation_of_the_People_Act170609.pdf
5.1.6	This use case refers to regulations relating to parliamentary and local government elections (Representation of the People Regulations) http://www.regjeringen.no/upload/KRD/Kampanjer/valgportal/Regelverk/Regulations_2003_EN_170609.pdf
5.1.7	This use case also refer to the Council of Europe e-vote Recommendation Rec(2004) 11. http://www.coe.int/t/dgap/democracy/activities/GGIS/E-voting/Key_Documents/Rec(2004)11_Eng_Evoting_and_Expl_Memo_en.pdf