

Institutional Mechanism for e-Governance Standards Formulation

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**Department of Information Technology
Ministry of Communications & Information Technology
New Delhi**

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1. Scope

1.1 Objective

To describe basic rules, principles and procedures to be followed for formulation of e-Governance Standards.

“Formulation of a standard” means a process of evolving and documentation of a standard, which may consist of:

- **Adoption** of an already existing National / Global Standard, which fulfills the need Or
- Need based **Adaptation** (customization / Extension) of a an existing National / Global Standard Or
- Need based development **of a New Standard** based on best practices /Global solutions

Aim of Standards formulation for e-Governance Applications:

- a) To ensure smooth flow of information between citizen, business and Governments (State and Central) by having interoperable systems which are scaleable for future transaction volumes and frequencies;
- b) To make requirements and specifications available in the public domain,
- c) To promote reduction of effort (cost by variety reduction) and risk leading to economic solution;
- d) To protect consumer interests by facilitating adequate and consistent quality of Information and Services with human centric design of systems;
- e) To provide users a common terminology and a framework for communicating technologies across different domains;
- f) To avoid Vendor lock-in.

1.2 Types of Standards Documents

The standards documents may be any of the following types:

- a) Policies;
- b) Technical Standards;
- c) Recommended Best Practices;
- d) Guidelines / Procedures.

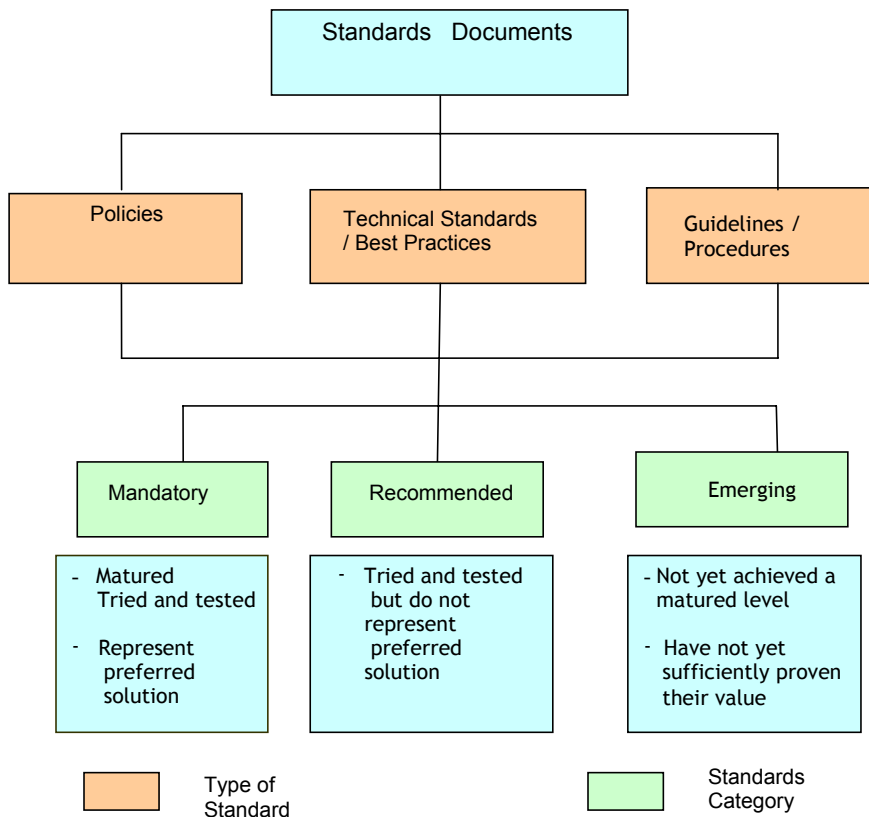
These standards are differentiated by the degree of prescription in their normative requirements as follows:

Policies: The documents that enforce certain sets of instructions that should be mandated in an organization. They usually represent / refer to standards / processes / methods / products for e-Governance applications. Policies have to be adhered to.

Technical Standards: Documents that establish engineering and technical requirements / specifications for processes, practices and methods. They contain the provisions necessary to verify compliance. Generally characterized by the term “Shall”.

Recommended Best Practices: Documents that contain authorization engineering, technical or design information including Architectures, Frameworks and data relating to processes, procedures, practices and methods. They are characterized by the use of the term “should”.

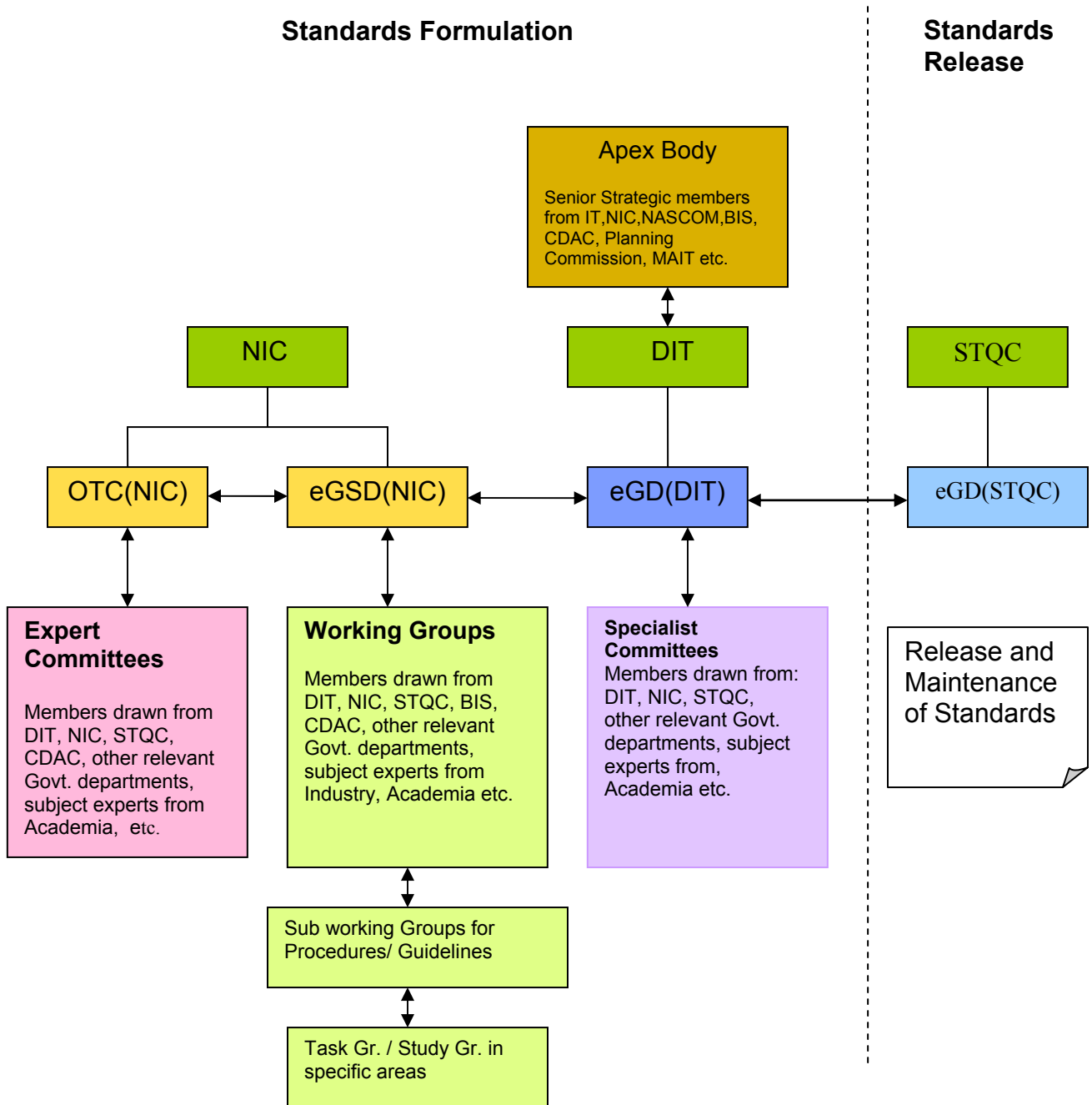
Guidelines / Procedures: Documents that contain technical information in support of Specifications and Recommended Best Practices. Guidelines provide instructions and data for the application of standards and recommended best practices, procedures and methods. Guidelines suggest alternative approach to good practice but generally refrain from clear-cut recommendations; they are characterized by the use of the verb “may”.



2. Institutional Mechanism for Standards Formulation:

2.1 Institutional Mechanism

Department of Information Technology (DIT), Govt. of India, has set up an institutional mechanism for Standards formulation. This activity is governed by an Apex body headed by Secretary, DIT.



2.2 Stakeholders and their roles

	Stakeholder	Role
a	<p>Apex Body Apex Body chaired by the Secretary, DIT</p> <p>Members from: Senior Strategic members from: DIT, NIC, NASCOM, BIS, CDAC, Planning Commission etc.</p>	<p>a. Act on behalf of Government of India and design the <u>broad policy framework</u> for setting standards for the e-Governance initiatives in India;</p> <p>b. Guide on the issues of strategy, conflict resolution and the exemptions;</p> <p>c. Approve the recommended Standards, after ensuring that due processes have been followed</p> <p>d. Ensure that the Standards recommended are in conformity with the relevant international Standards where appropriate</p>
b	<p>PRSG Project Review Steering Group, chaired by Secretary DIT (Combined PRSG OTC(NIC) & Standards.)</p>	<p>a. Review the <u>Financial and Technical Progress</u> of the Project</p>
c	<p>eGD(DIT) e-Governance Division, DIT</p>	<p>a. Set Priorities for Standards Formulation in view of National e-Governance Plan (NeGP) requirements;</p> <p>b. Constitute Specialist Committees for Policies formulation in the identified priority areas;</p> <p>c. Coordinate with Specialist committees for policies formulation;</p> <p>d. Review draft Standard documents for comments;</p> <p>e. Submit draft recommendations received from eGSD(NIC) to Apex Body for review and approval</p> <p>f. Mandate the implementation of Standards in Ministries/Departments at Central & State Governments wherever required, otherwise recommend the same;</p> <p>g. Periodically review the functioning of the processes laid for standardization</p> <p>h. Awareness & promotional activities regarding standardization</p>

	<p>SC Specialist Committees coordinated by DIT</p> <p>Members drawn from: DIT, NIC, STQC, other relevant Govt. departments, subject experts from, Academia etc.</p>	<p>a. Work on Policy areas identified by DIT with respect to Standards Formulation</p>
f.	<p>eGD(STQC) e-Governance Division, STQC</p>	<p>a. Release and maintain formulated Standards;</p> <p>b. Liaise with national and international standardization bodies for harmonization and acceptance of these Standards;</p> <p>c. Steer review and change management process of the Standards once a year in collaboration with eGSD(NIC);</p> <p>d. Compile comments/suggestions of public on released standards for forwarding to eGSD (NIC) for consideration and revision of documents by the concerned;</p> <p>e. Create and manage web site for publication of approved formulated Standards, with provision of comments / requests for revisions submission by others.</p>
e	<p>eGSD(NIC) e-Governance Standards Division, NIC</p>	<p>a. Steer and manage the standardization activities ;</p> <p>b. Provide secretariat support to the Working groups, Apex Body etc;</p> <p>c. Constitute Working Groups with the approval of DIT;</p> <p>d. Coordinate and monitor progress of the Working Groups, OTC(NIC), and other bodies for review of draft standards;</p> <p>e. Submit draft document, draft recommendation and to DIT for review and further submission for approval by Apex Body where appropriate;</p>

		<p>f. Develop and maintain web site for sharing of documents / white papers / proceedings / events announcements etc.</p> <p>g. E-Governance Standards Division Head to coordinate and Process the hiring of consultants, manpower, wherever required.</p>
d.	<p>OTC(NIC) Open Technology Centre, NIC with respect to Standards formulation</p>	<p>a. Constitute Expert Committees in Technology areas, which are identified as priority areas by DIT;</p> <p>b. Coordinate and steer Expert committees for Standards formulation;</p> <p>c. Validate / ensure compliance of formulated standards against National Policy on Open Standards, in case of conflicting comments of the reviewing agencies;</p> <p>d. Provide outsourced / Wet-Leased Expert manpower support to the Expert Committees, WGs & eGSD(NIC), whenever required so . For this purpose, OTC(NIC) can hire a technically experienced consultant for liaison among Industry, Educational Institutes and OTC(NIC) for identification of appropriate subject experts from the market and also to coordinate to see the progress of work done by the Wet-Leased Expert, whenever required so;</p> <p>e. Provide funding support to Expert Committees</p>
i.	<p>EC Expert Committees coordinated by OTC(NIC), Chennai</p> <p>Members drawn from DIT, NIC, STQC, CDAC, other relevant Govt. departments, subject experts from Academia, etc.</p>	<p>a. Formulate Technical Standards in the priority areas setup by DIT, under pre-defined terms of reference and the laid down procedure for the same, in accordance with national policy on open standards</p> <p>b. Incorporate feedback received from different agencies in various stages of standard formulation.</p>
g.	<p>WG Working Groups</p> <p>Members drawn from DIT, NIC, STQC, BIS, CDAC, other relevant Govt. departments, subject experts from Industry, Academia etc.</p>	<p>a. Prepare <u>top level documents</u> in the assigned areas</p> <p>b. Feedback on draft technical standards prepared by Expert Committees ;</p> <p>c. Validate the draft standards & indicate if there is any violation of the policy on Open Standards</p> <p>d. Create Subgroups / identify consultants for</p>

		<p>preparation of Guidelines / Procedures to be followed in e-Governance Project life cycle in the priority areas set by DIT, and in accordance with national policy on open standards;</p> <p>e. Coordinate with sub groups / consultants for formulation of Guidelines / procedures;</p> <p>f. Review Draft guidelines / procedures prepared by Subgroup / consultant</p>
<p>h.</p>	<p>SWG Sub Working Groups</p> <p>Members drawn from DIT, NIC, STQC, BIS, CDAC, other relevant Govt. departments, subject experts from Industry, Academia etc.</p>	<p>a. Prepare Guidelines / Procedures in the allocated areas, and in accordance with national policy on open standards;</p> <p>b. To provide inputs on policy / technology related areas in the form of white papers, approach papers etc. if desired by the Specialist / Expert Committees and Working groups.</p>

3.0. Procedure / Practice to be followed

3.1 stages of standard formulation

Stage	Expected outcome	Ownership : Creation and Revision Rights	Reviewing Agency
3	Top level Document	Working Group	
2	Draft Document 2a. Preparation of draft Document 2b. Closed group review 2c. Public Review	2a. Policies: eGD(DIT)/ Specialist Committee	2b. Closed Group Review <ul style="list-style-type: none"> - Working Groups - eGD(DIT) - eGD(STQC) - OTC(NIC) - eGSD(NIC) - Any other stakeholders recommended by the committee / Working Group
		2a. Technical Standards: OTC(NIC)/ Expert Committee 2a. Guidelines/procedures eGSD(NIC) / Working Groups	2b. Closed Group Review <ul style="list-style-type: none"> - Working Groups - eGD(DIT) - eGD(STQC) - OTC(NIC) - eGSD(NIC) - Any other stakeholders recommended by the Specialist committee/ Expert Committee / Working Group 2c. Public Review
1	Draft Recommendation	----- do-----	Apex body
0	Standard ready for release by eGD(STQC)	----- do-----	

Note: For the standards, which do not require vetting against Policy on Open standards, Closed group review and Public review would be done simultaneously.

3.2 Detailing of Standards formulation Process

3.2.1 Policies formulation by Specialist Committees

Activity	Stage & Ideal Time line
<ol style="list-style-type: none"> 1. eGD(DIT) to identify priority area to be taken up for Policy formulation on the basis of recommendations of Working Groups / NeGP/ Government's e-Gov. requirements etc.; 2. eGD(DIT) to create relevant Specialist Committee and issue terms of reference (TOR); 3. eGSD(NIC) to handover top level documents, if any, prepared by Working groups to the Specialist Committee; 	<p>Stage 3</p>
<ol style="list-style-type: none"> 4. Specialist Committee to prepare draft policy document in the Performa at Annexure – 4; 	<p>Stage 2a As per TOR</p>
<ol style="list-style-type: none"> 5. Specialist committee to submit draft document to eGSD(NIC) through eGD DIT) for review comments by closed group: <ol style="list-style-type: none"> a. Working Groups b. eGD(DIT) c. eGD(STQC) d. OTC(NIC) e. eGSD(NIC) f. Any other stakeholders recommended by the specialist committee <p>Note: The draft policy document would be made available on web site http://egovstandards.gov.in for review comments by the above stakeholders;</p>	<p>Stage 2b Time Line: 4 weeks</p>
<ol style="list-style-type: none"> 6. Specialist committee to incorporate suggestions and bring out Draft Recommendations. 7. Specialist Committee to submit Draft recommendations to DIT through for submission to Apex Body for review and approval 8. Apex Body to review the draft recommendation and either: <ol style="list-style-type: none"> i. Approve the policy as proposed OR ii. Send the Policy back to the Specialist committee for incorporation of comments thro' eGD(DIT), to repeat revision, closed group review / Apex Body review till the policy is approved by Apex Body OR 	<p>Stage 1 Time Line 4 weeks</p>

<p>iii. eGD(DIT) to incorporate the changes directly, in case the changes do not affect the basic theme, and obtain approval of Apex body.</p>	
<p>10. DIT to formally forward the approved Policy document to eGD(STQC) for release.</p>	<p>Stage 0</p>

Note : The Specialist committee to maintain log of review comments, and action taken in the stages 2b, and 1.

- Refer Annexure 1 for Graphical representation of documents flow

3.1.2 Technical Standards / Best Practices formulation by Expert Committees

Activity	Stage
<p>2. eGD(DIT) to inform NIC about identified priority area to be taken up for Technical Standards/ Best Practices on the basis of recommendations of Working Groups / NeGP/ Government's e-Gov. requirements etc;</p> <p>3. OTC(NIC) in consultation with DG(NIC) to form relevant Expert Committee and issue terms of reference (TOR) ;</p> <p>4. eGSD(NIC) to handover top level documents, if any , prepared by Working groups to the Expert Committee ;</p>	<p>Stage 3</p>
<p>5. Expert committee to study International Standards and formulate standards in line with National policy on open Standards;</p> <p>6. Expert Committee to prepare draft standard document in the Performance Annexure – 4 ;</p>	<p>Stage 2a</p> <p>As per TOR</p>
<p>7. Expert committee to submit draft document to eGSD(NIC) through OTC (NIC) for review comments by closed group:</p> <ul style="list-style-type: none"> a. Working Groups b. eGD(DIT) c. eGD(STQC) d. OTC(NIC) e. eGSD(NIC) f. Any other stakeholders recommended by the Expert committee <p>Note: The draft document would be made available on http://egovstandards.gov.in for review comments by the above stakeholders and validation against Policy on Open Standards;</p>	<p>Stage 2b</p> <p>Time line 4 weeks</p>
<p>8. Expert committee to incorporate the corrections and submit again to eGSD(NIC) thro' OTC(NIC) for review comments by public;</p> <p>Note: The draft document to be made available to public for review on the web site http://egovstandards.gov.in;</p> <p>9. Expert committee to incorporate comments of public and again repeat steps 6 to 8, if required;</p> <p>Note: For the standards, which do not require vetting against Policy on Open standards, Closed group review and Public review would be done simultaneously.</p>	<p>Stage 2c</p> <p>Time Line 4 weeks</p>

<p>10. After incorporating review comments ,the Expert committee to prepare draft recommendation with help of technical editor (if required);</p> <p>11. Expert Committee to submit Draft recommendations to eGD(DIT) through OTC(NIC) → eGSD(NIC) for submission to Apex Body for review and approval;</p> <p>12. Apex Body to review the draft recommendation and either:</p> <ul style="list-style-type: none"> i. Approve the recommended standard as proposed OR ii. Send the recommended Standard back to the expert committee for incorporation of comments through eGD(DIT)→eGSD (NIC) →OTC (NIC). <p>Expert committee to incorporate corrections, and repeat steps 6 to 12 till approved by Apex Body OR</p> <ul style="list-style-type: none"> iii. eGD(DIT) to incorporate the changes directly and obtain approval of Apex body 	<p>Stage 1</p>
<p>13. eGD(DIT) to formally forward Technical standard / Best Practices to eGD(STQC) for its release.</p>	<p>Stage 0</p>

Note : The Expert Committee to maintain record of review comments, and action taken in the stages 2b, 2c and 1

Refer Annexure 2 for Graphical representation of documents flow

3.2.3 Guidelines/ Procedures by Working Groups

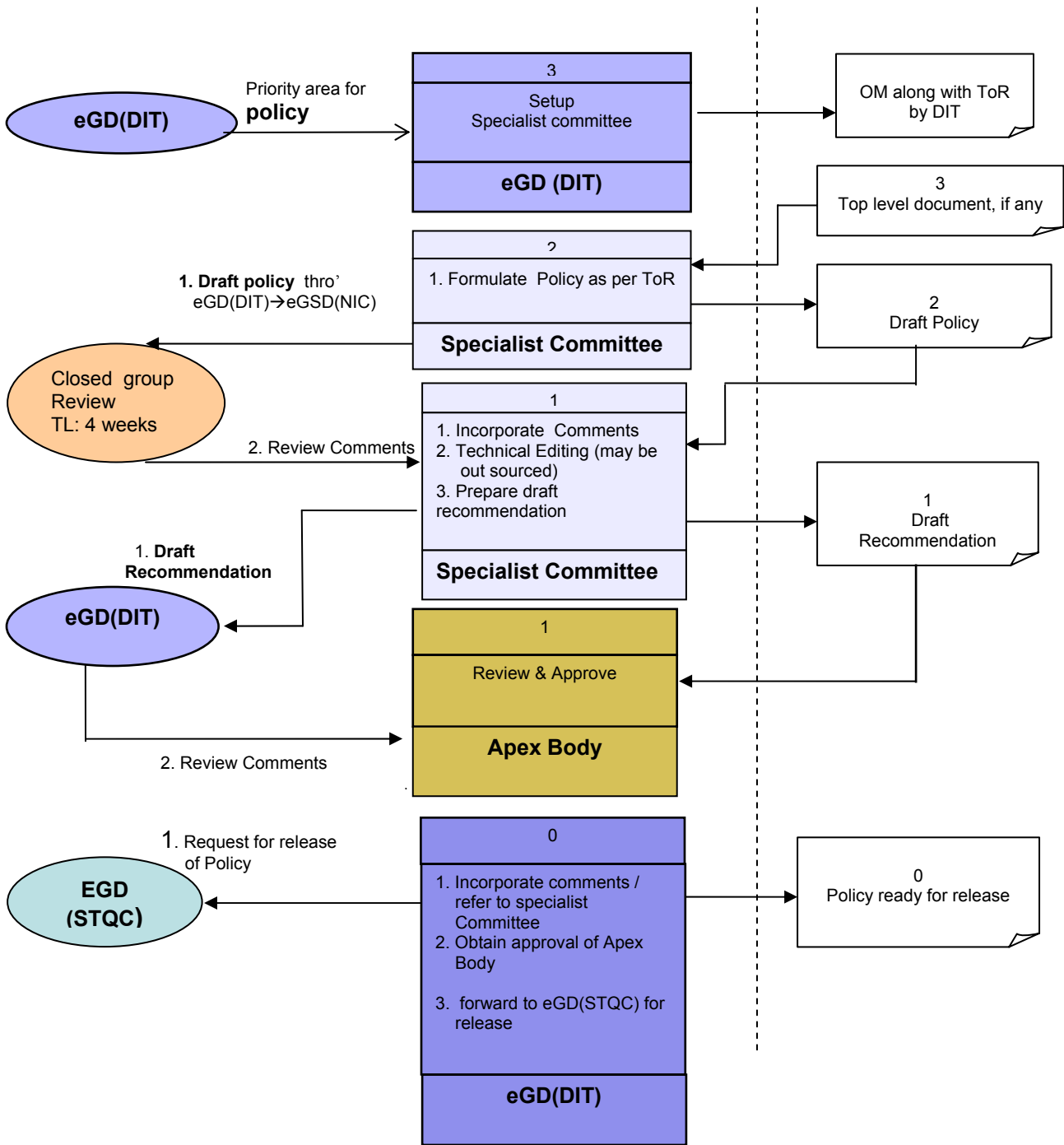
Activity	Stage
<ol style="list-style-type: none"> 1. eGD(DIT) to identify priority area to be taken up for preparation of Guidelines / Procedures on the basis of recommendations of DIT/ Expert Committees / Working Groups / NeGP/ Government's e-Gov. requirements etc; 2. eGSD(NIC), to request relevant working group to prepare guidelines / Procedures based on national policy on open standards; 3. Working group to form a sub group or identify an consultant for the same 	<p>Stage 3</p>
<ol style="list-style-type: none"> 4. Sub Working group / Consultant to prepare draft document in the perform at Annexure – 4 and submit to the Working group for review; 	<p>Stage 2a</p>
<ol style="list-style-type: none"> 5. Working Group to submit draft document to eGSD(NIC) for review comments by closed group: <ol style="list-style-type: none"> a. Working Groups b. eGD(DIT) c. eGD(STQC) d. OTC(NIC) e. eGSD(NIC) f. Any other stakeholders recommended by the working group <p>Note: The draft document to be made available on web site http://egovstandards.gov.in for review comments by the above agencies</p>	<p>Stage 2b</p> <p>Time Line : 4 weeks</p>
<ol style="list-style-type: none"> 6. Working Group / Sub working group / Consultant to incorporate the corrections and submit again to eGSD(NIC) for review comments by public 7. Working Group / Sub working group / Consultant to incorporate comments of public and again repeat steps 5 and 6 , if required; <p>Note: The draft document to be made available on web site http://egovstandards.gov.in for review comments by the above agencies</p>	<p>Stage 2c</p> <p>Time Line: 4 weeks</p>
<ol style="list-style-type: none"> 8. Working group/ Sub working group /Consultant to bring out Draft Recommended Guidelines / Procedures 9. eGD(DIT) to review and <ol style="list-style-type: none"> i. approve the recommended guidelines as proposed OR ii. Send the recommended guidelines back to the Working group for incorporation of comments through eGSD (NIC) & the working 	<p>Stage 1</p> <p>Time Line: 4 weeks</p>

<p>group to incorporate corrections, and repeat steps 5 to 8 till approved by eGD(DIT) OR</p> <p>iii. Incorporate the changes directly, in case they do not affect the basic theme of the guidelines / procedures and obtain approval of Apex Body for the same.</p>	
<p>7. eGD(DIT) to formally forward Guidelines / Procedure to eGD(STQC) for its release</p>	<p>Stage 0</p>

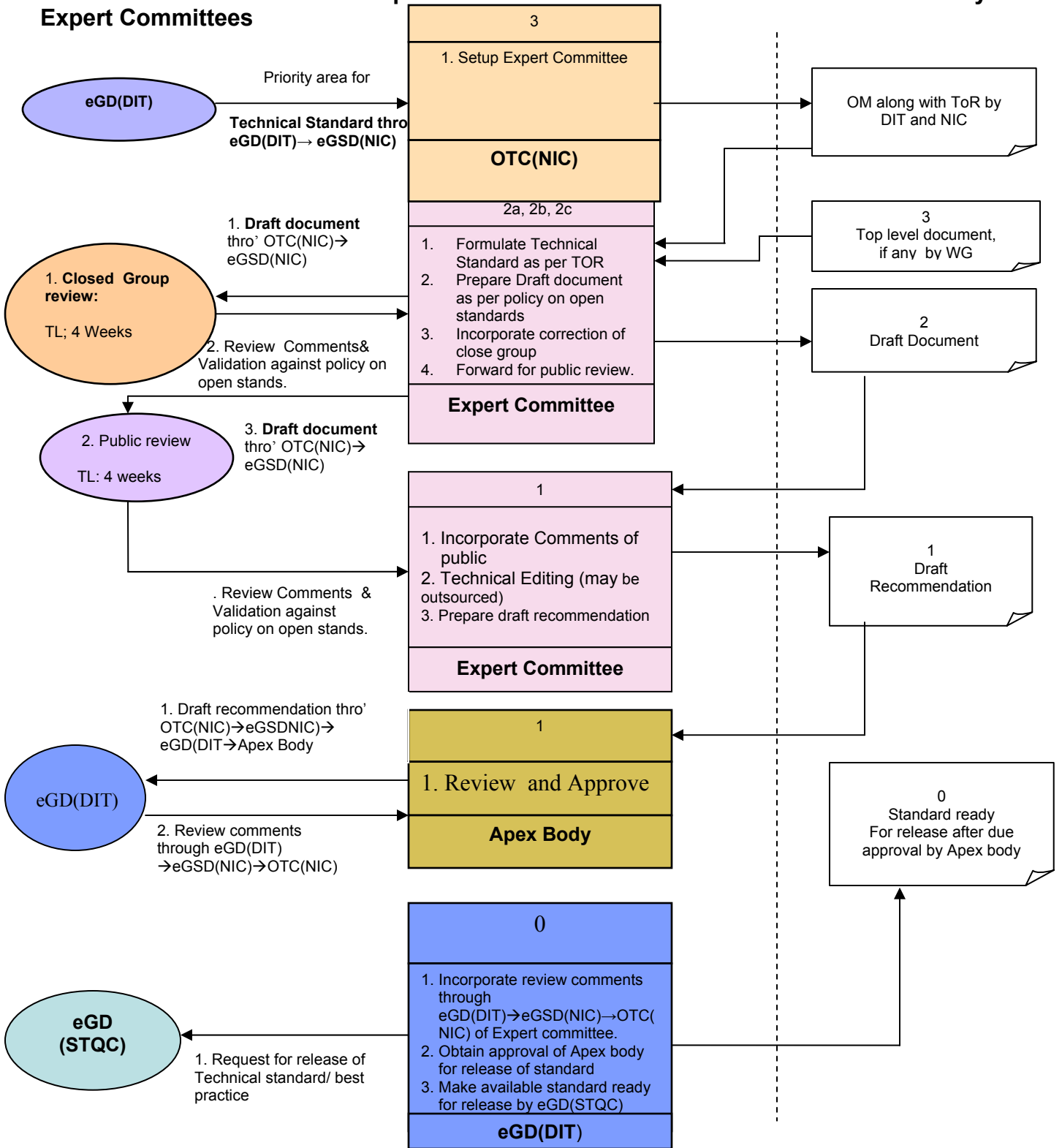
Note : The Working group would maintain record of review comments, and action taken in the stages 2b, 2c and 1.

- Refer Annexure 3 for Graphical representation of documents flow

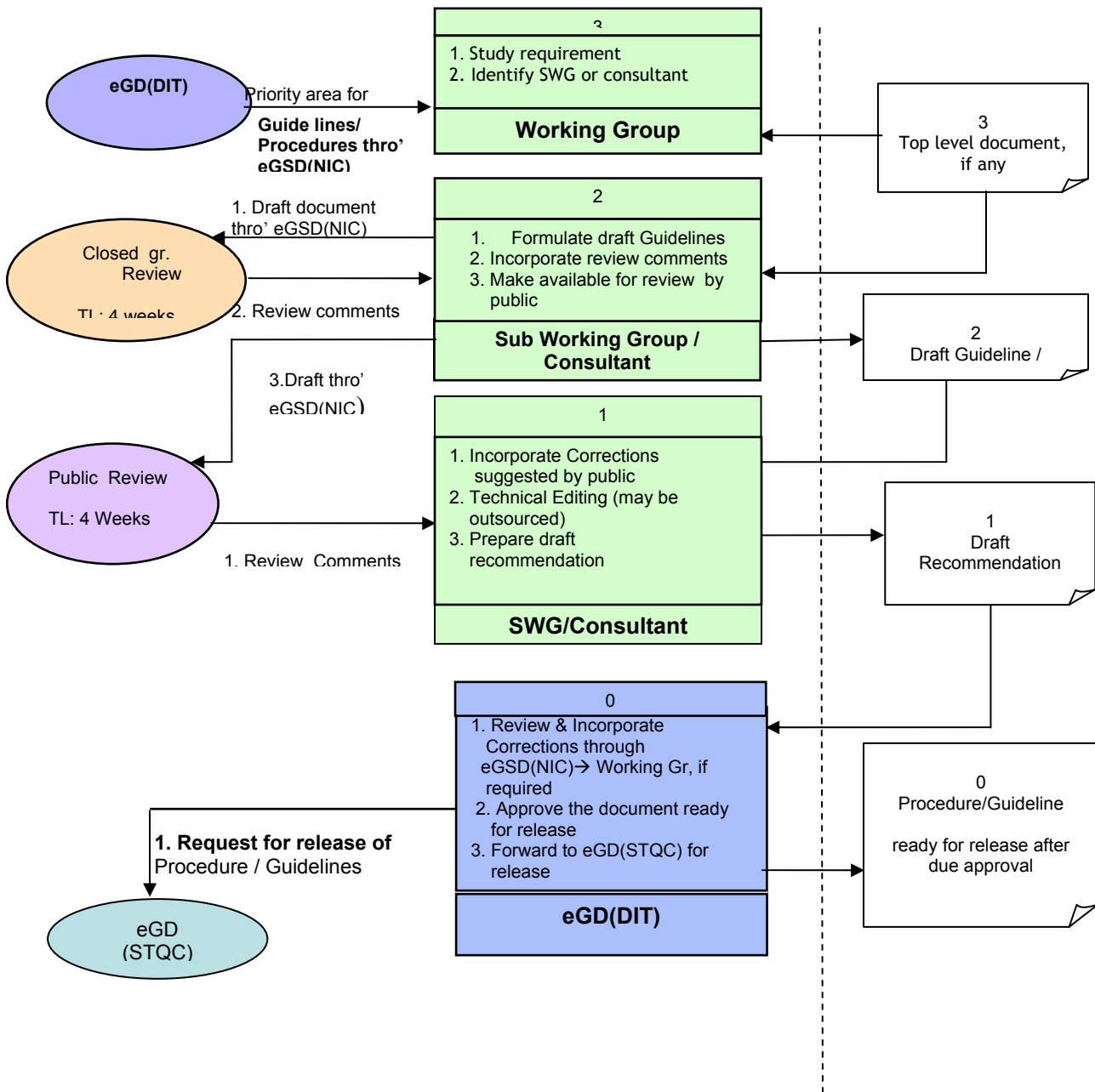
Annexure – 1 Procedure for Preparation of Policies by Specialist Committee



Annexure 2- Procedure for Preparation of Technical Standards / Best Practices by Expert Committees



Annexure – 3 Procedure for Preparation of Guidelines / Procedures by Working Group



Annexure - 4a Standard Documentation Template Outline

Section No.	Name of the Section
	Title of the formulated Standard indicating addressed area Document No. (<i>to be given at the time of publication</i>) (<i>Note: Title should indicate, if it is a Policy / Technical Specification/ best practice /Guideline / Procedure, and name of the addressed area</i>) e.g. : <i>Guidelines for framing Service Level Agreement</i>
	Introduction (<i>Common introduction about the role of standards in e-Governance- to be added at the time of publication of the standard</i>)
	Metadata Elements (<i>To be given at the time of publication of the standard</i>)
	Table of contents
1.0	Scope
1.1	Objective /Purpose <i>of the Standards document for addressed area</i>
1.2	Description <i>of addressed area including issues and challenges addressed</i>
2.0	Target Audience (<i>Those, who may refer the document</i>)
3.0	Type of Standards Document (<i>Policy, Technical Standard: Specification/ Recommended Best Practice, Guidelines, Procedure</i>) Enforcement Category (<i>Mandatory, Recommended, Emerging</i>)
4.0	Definitions and Acronyms (<i>May be given as Annexure, if required so</i>)
5.0	Details of Policy / Technical Standard Specifications /Recommended Best Practices / Guidelines, whichever applicable
6.0	Steps / Procedure / Practice to be followed for implementation
7.0	Annexure , if any
8.0	Reference, if any
9.0	Acknowledgement to the contributors and their list

Annexure - 4b Document Page layout Instructions

i. Header of the report should be as follows:

<Name of the stage>

< Title of the document>

< Body of the page>

Footer of the document should be as follows:

Version No

Date (dd/mm/yyyy)

Page # Of ##

ii. Versioning convention would be as follows:

The syntax for allocating the version no would be Version . stage no . (xx) Incremental no in a particular stage, starting with .01

Stage	Name of the stage	Stage No - Version
4	Top level document by working group	Version.4.xx
3	Initial draft within the Committee	Version.3.xx
2a	Draft Document ready for review comments	Version.2a.xx
2b	Draft document under closed group review stage	Version.2b.xx
2c	Draft document under Public review stage	Version.2c.xx
1	Draft Recommendation under review by Apex body	Version.1.xx
0	Standard ready for release	Version 1.0