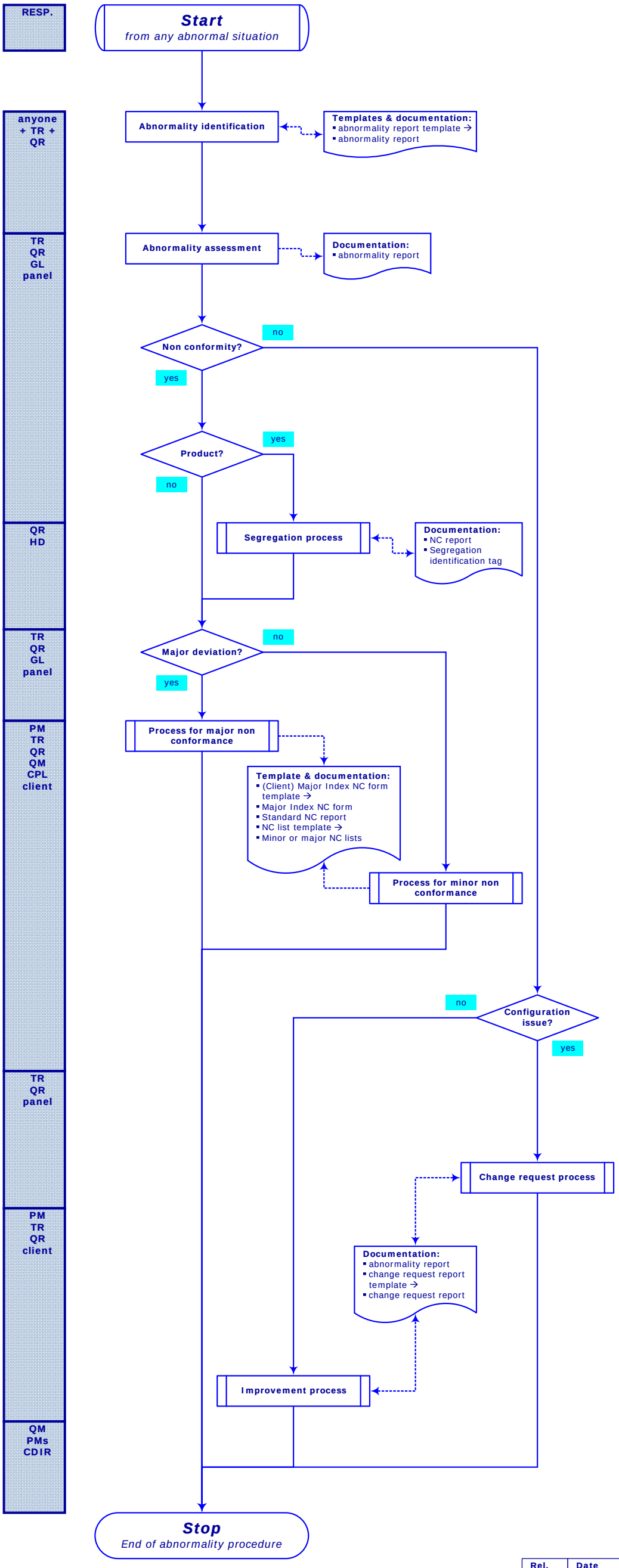


Comment on the phase	WHAT?
Identification of any abnormality *on a product, in a specification, procedure, process, etc. by* ▪ any PT member, stakeholder, legal survey, auditor, vendor, CRPP or consortium member. ▪ ***Abnormality forms can be*** ▪ any verbal or written client's or supplier's claim ▪ any observed or found out inconsistency versus regulations, specifications, scope, goal, schedule, budget, PMP, etc. ▪ any minutes from any meeting related to a project.	***Inform TR & QR of the project who will immediately:*** ▪ fill an abnormality report, ▪ inform PM ▪ summon necessary people for the abnormality assessment
Appraisal of the abnormality *by a panel team defined by TR and QR according to the abnormality object* ▪ Panel: TR, QR, PM, CPL, other persons chosen by TR or QR according to WBS, as needed. It can include concerned suppliers ***Abnormality & standard NC Report:*** *Common report for minor and major non-conformity* ▪ A simple checkbox indicates that the abnormality report becomes a standard NC report. ▪ It will stipulate all data's of the abnormality, an accurate definition of the NC, the number of related part if available, the causes of the NC, if it is a major or a minor one, the proposed corrective actions, their impact on schedule, budget, safety with regards to the scope of the contract, the records of implementation and implementation results, etc.	▪ The panel must quickly appreciate what is in question and reply to 3 questions: ▪ Is-it a non-compliance? ▪ Is the object of the non-compliance a product? ▪ Is the non-compliance major or minor with regards to the client's criteria.? ▪ In case of non-conformity on a product, the panel must determine ▪ if the production must be stopped, either to CRPP/ consortium facilities or to that of supplier, ▪ how many items are involved, ▪ if some of them have already been delivered, ▪ if they must be tagged and segregated, ▪ if the documentation must be changed. ▪ QR completes the abnormality report according to the reply of the assessment panel. ▪ In case of non-conformity, the abnormality report becomes the standard NC report
Segregation process *is activated only if the non conformance relates to a product.* ▪ The product must be clearly identified and segregated in a safe stock to avoid any misuse. ▪ The defective product will stay segregated waiting on a definitive decision.	▪ QR & HD stops the production if decided, ▪ identifies clearly and tags the items that will immediately segregated in a specific safe stock ▪ QR specifies on standard NC report the segregated items and their tags, the date of the stop-production.
Process for minor or major non conformances ▪ The two processes are different and separated: ▪ Decision for the minor non conformance are taken by the internal management on the basis of the standard NC report, that includes proposed curative actions. ▪ Decision for major non conformance are only taken by the client on the basis of the standard NC report sent to the client 's RO, with its specific customer Major Index NC form. NC report includes proposed corrective actions. ▪ While waiting on the decision of the client, the related part of the running execution process is stopped. ▪ The NC report traces the NC up to its resolution, including corrective actions. ▪ The minor and major non conformances are registered on separate lists specific to the project. These lists are part of the ADP. ***Corrective actions*** *are the actions to eliminate the cause of a defected nonconformity or another undesirable situation:* ▪ Necessary actions to correct the defective parts (scrap & remake, rework, us as is), and ▪ Change request to modify either the design of the part, or the way to realize it or both.	***QR and a specific panel:*** ▪ identify the immediate causes and underlying causes of the non conformity, ▪ propose corrective actions (scrap and remake, use as is, rework, including decision on segregated items) and change requests if needed ▪ evaluate cost and time to implement them ▪ complete standard NC report with forecasted curative actions, ▪ edit the client Major Index NC form if needed, ▪ record the NC on minor or major NC list. ***Validation of the proposal by QM*** ***Approval:*** ▪ by CDIR or consortium PL for minor defect ▪ by customer for major defect ***QM with assistance of concerned responsible:*** ▪ implements the corrective actions, ▪ controls and records their efficiency on the standard NC report
Configuration issue ▪ Definition: Configuration is a relative arrangement of parts or elements, related to organisations to maintain and product services, results or components to deliver. ▪ Configuration issue is any change of any kind to the configuration of the project deliverables. ▪ A positive answer to this question implies to start a change control procedure. ▪ On the opposite, the abnormality indicates a vagueness in the project management process or quality management system, that must be solved.	
Change control procedures *include the steps by which official company standards, policies, plans and procedures, or any project documents will be modified, and how any change will be validated and approved.* ▪ The project management plan, the project scope statement, and other deliverables must be maintained by carefully and continuously managing changes, either by rejecting changes or by approving changes so those approved changes are incorporated into a revised baseline. ▪ Maintain the integrity of the baselines and the related configuration and planning documentation ▪ Control and update the scope, cost budget, schedule and quality requirements by coordinating changes across the entire project and documenting the complete impact of requested changes. ▪ Control project quality to standards based on quality reports.	▪ Identify that a change needs to occur or has occurred ▪ Prepare change requests ▪ Approve or reject change requests ▪ Update the PMP ▪ Update the project scope statement ▪ Propose corrective actions ▪ Approve or reject corrective actions ▪ Propose preventive actions ▪ Approve or reject preventive actions ▪ Propose defect repairs ▪ Validate and approve defect repairs ▪ Update documentation
▪ ***Improvement process*** *is based on a Process improvement plan that details the steps and targets of preventive actions* ▪ ***Preventive actions*** *are the actions which aim at eliminating the cause of a potential non-conformity or other undesirable potential situation:* ▪ change request to modify the organisation of the association or consortium, its management processes including PMP ▪ investments in new competences and equipments, ▪ new suppliers and subcontractors	***Process analysis of:*** ▪ Process boundaries (purpose, start, end, inputs, outputs of the process, data required, owner and stakeholders) ▪ Process configuration in order to check the quality of interfaces (flowchart of processes with identified interfaces) ▪ Over status of processes (Process metrics) ▪ audit minutes, NC, corrective & preventive actions reports ***Plan and implement:*** ▪ change requests (corrective actions) in project, consortium or association quality organisation ▪ organisational process assets (update)

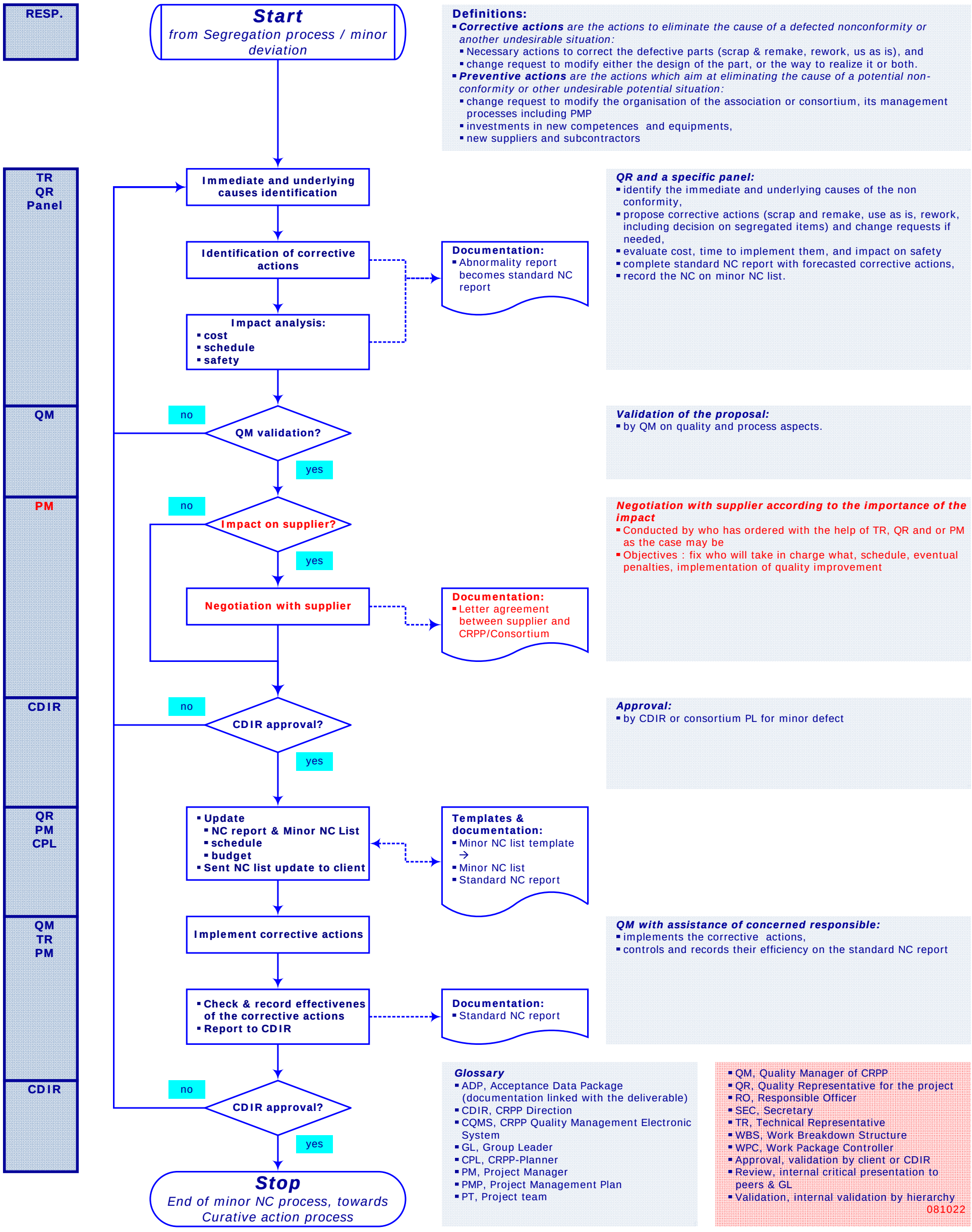
Glossary
- ADP, Acceptance Data Package (documentation linked with the deliverable)
- CDIR, CRPP Direction
- CQMS, CRPP Quality Management Electronic System
- GL, Group Leader
- CPL, CRPP-Planner
- PM, Project Manager
- PMP, Project Management Plan
- PT, Project team

- QM, Quality Manager of CRPP
- QR, Quality Representative for the project
- RO, Responsible Officer
- SEC, Secretary
- TR, Technical Representative
- WBS, Work Breakdown Structure
- WPC, Work Package Controller
- Approval, validation by client
- Review, internal critical presentation to peers & GL
- Validation, internal validation by hierarchy

081008

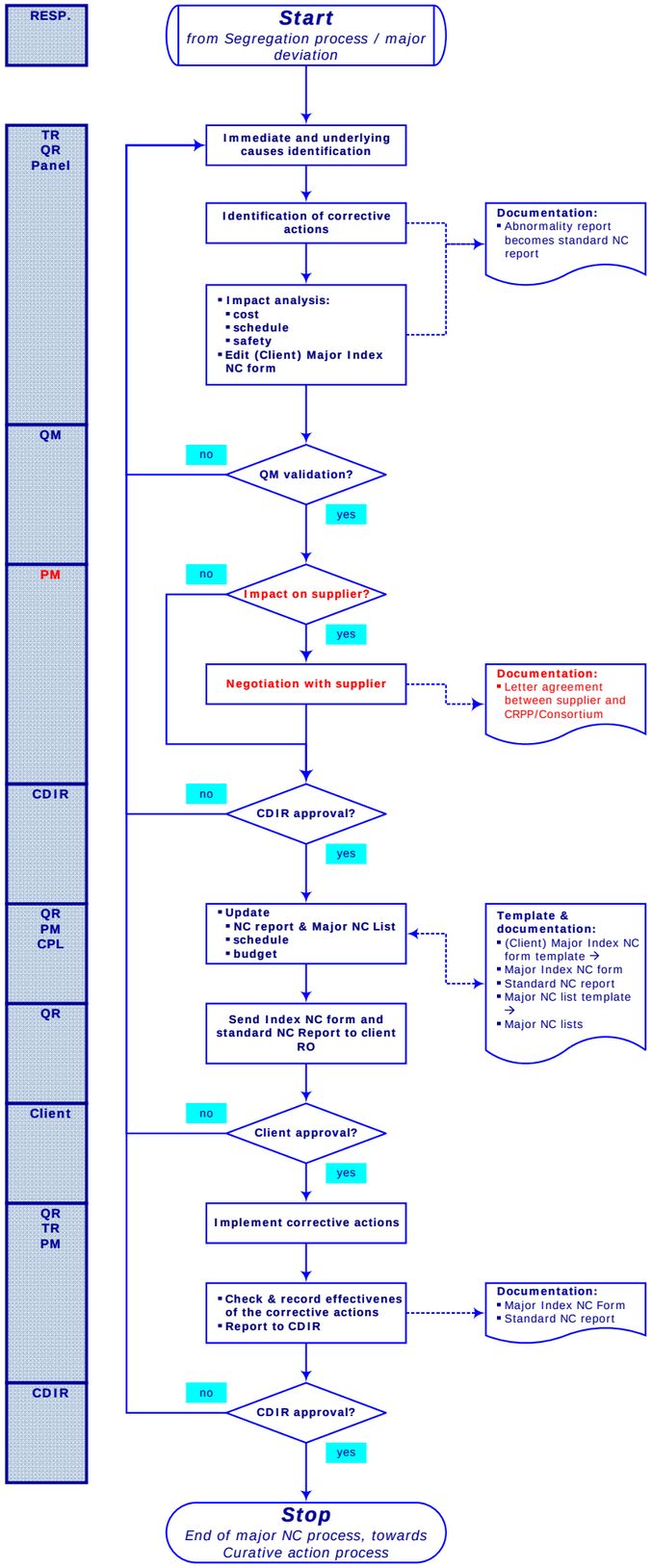
Rel.	Date	Designation	Author	Checked
0.0.1	23.10.08	Reworked to include corrective actions in NC management processes & comments changes	Léonard	
0.0.0	08.10.08	First design for ITERMAG & CRPP	Léonard	

ABNORMALITY MANAGEMENT PROCESS



Rel.	Date	Designation	Author	Checked
0.0.2		Added issue and process on Impact on supplier		
0.0.1	23.10.08	New design common to CRPP & ITERMAG, related to the Abnormality management process	Léonard	
0.0.0	11.04.08	First design for CRPP	Léonard	

MANAGEMENT PROCESS FOR MINOR NON CONFORMITY



Definitions:

- ***Corrective actions*** *are the actions to eliminate the cause of a defected nonconformity or another undesirable situation:*
  - Necessary actions to correct the defective parts (scrap & remake, rework, us as is), and
  - change request to modify either the design of the part, or the way to realize it or both.

- ***Preventive actions*** *are the actions which aim at eliminating the cause of a potential non-conformity or other undesirable potential situation:*
  - change request to modify the organisation of the association or consortium, its management processes including PMP
  - investments in new competences and equipments,
  - new suppliers and subcontractors

QR and a specific panel:

- identify the immediate and underlying causes of the non conformity,
- propose corrective actions (scrap and remake, use as is, rework, including decision on segregated items) and change requests if needed,
- evaluate cost, time to implement them, and impact on safety
- complete standard NC report with forecasted corrective actions,
- record the NC on minor NC list.

Validation of the proposal:

- by QM on quality and process aspects.

Negotiation with supplier according to the importance of the impact

- Conducted by who has ordered with the help of TR, QR and or PM as the case may be
- Objectives : fix who will take in charge what, schedule, eventual penalties, implementation of quality improvement

Approval:

- by CDIR or consortium PL for minor defect

QM with assistance of concerned responsible:

- implements the corrective actions,
- controls and records their efficiency on the standard NC report

Glossary

- ADP, Acceptance Data Package (documentation linked with the deliverable)
- CDIR, CRPP Direction
- CQMS, CRPP Quality Management Electronic System
- GL, Group Leader
- CPL, CRPP-Planner
- PM, Project Manager
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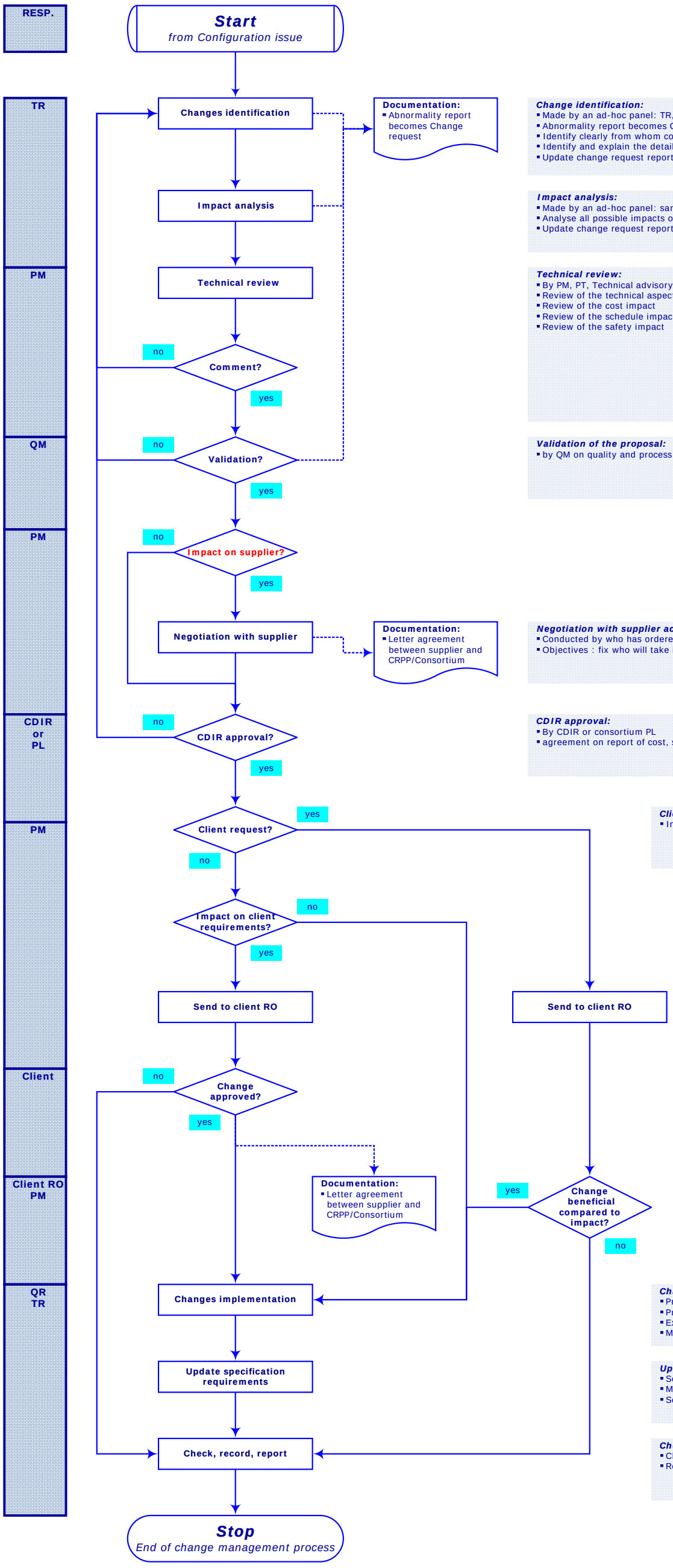
- PT, Project team
- QM, Quality Manager of CRPP
- QR, Quality Representative for the project
- RO, Responsible Officer
- SEC, Secretary
- TR, Technical Representative
- WBS, Work Breakdown Structure
- WPC, Work Package Controller
- Approval, validation by client or CDIR
- Review, internal critical presentation to peers & GL
- Validation, internal validation by hierarchy

081022

Rel.	Date	Designation	Author	Checked
0.0.1	27.1.08	Added issue and process on Impact on supplier	Léonard	
0.0.0	23.10.08	New design common to CRPP & ITERMAG, related to the Abnormality management process	Léonard	

MANAGEMENT PROCESS FOR MAJOR NON CONFORMITY



Change identification:
- Made by an ad-hoc panel: TR, concerned HDs, suppliers if needed
- Abnormality report becomes Change request report
- Identify clearly from whom comes the request (organism and person)
- Identify and explain the detailed proposed change (technical, organisational, process) and their reason
- Update change request report

Impact analysis:
- Made by an ad-hoc panel: same + CPL & QR
- Analyse all possible impacts of the changes on project cost, to whom the extra cost must be charged, on schedule, on safety if needed
- Update change request report

Technical review:
- By PM, PT, Technical advisory group
- Review of the technical aspects
- Review of the cost impact
- Review of the schedule impact
- Review of the safety impact

Validation of the proposal:
- by QM on quality and process aspects.

Negotiation with supplier according to the importance of the impact
- Conducted by who has ordered with the help of TR, QR and or PM as the case may be
- Objectives : fix who will take in charge what, schedule, eventual penalties, implementation of quality improvement

CDIR approval:
- By CDIR or consortium PL
- agreement on report of cost, schedule and risk and on request to client as the case may be

Client request:
- Information is on the change request

Change beneficial:
- Conference with the client RO to present impact of his change request.
- Eventual negotiation if needed

Changes implementation:
- Prepare the documentation to implement the changes in the different concerned services or departments.
- Prepare the list of documents to modify and where they must be sent
- Explain the changes and comment their deep signification to the involved staff as the case may be
- Monitor the changes up to the suppliers if needed

Update specifications:
- Send the modified documents to the concerned services, departments, suppliers
- Monitor their application
- Send the updated documentation to client

Check effectiveness of the application of changes:
- Check according to the list of documents and of their application
- Report to the QM

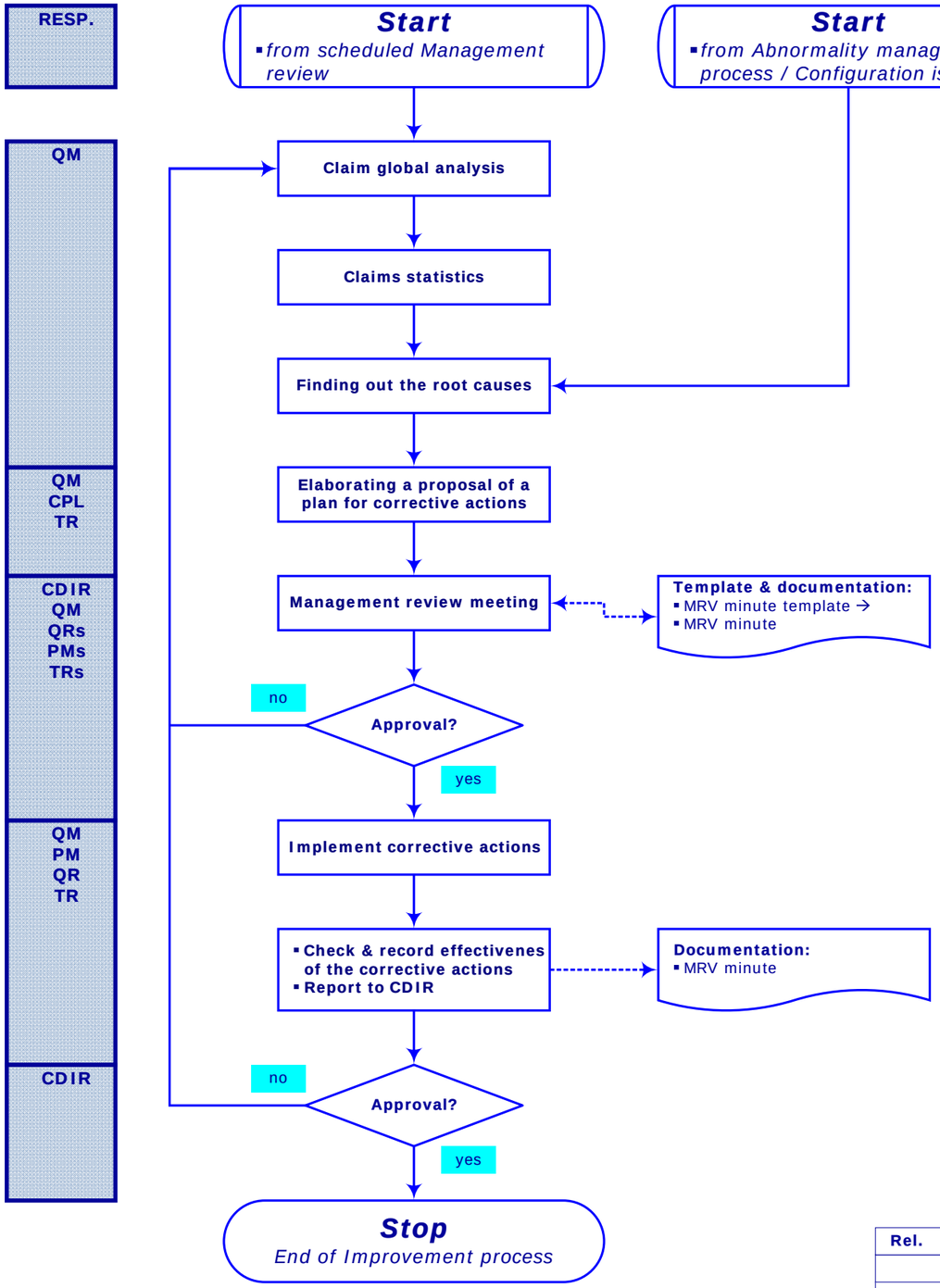
Glossary
- ADP, Acceptance Data Package (documentation linked with the deliverable)
- CDIR, CRPP Direction
- CQMS, CRPP Quality Management Electronic System
- GL, Group Leader
- CPL, CRPP-Planner
- PL, Consortium Project Leader
- PM, Project Manager (Contract Manager)
- PMP, Project Management Plan
- PT, Project team

- QM, Quality Manager of CRPP
- QR, Quality Representative for the project
- RO, Responsible Officer
- SEC, Secretary
- TAG, Technical advisory group
- TR, Technical Representative
- WBS, Work Breakdown Structure
- WPM, Work Package Manager
- Approval, validation by client or CDIR
- Review, internal critical presentation to peers & GL
- Validation, internal validation by hierarchy

081024

Rel.	Date	Designation	Author	Checked
0.0.1		Changes for PROM3 in red		
0.0.0	24.10.08	New design common to CRPP & ITERMAG, related to the Abnormality management process	Léonard	

MANAGEMENT PROCESS FOR CHANGE REQUEST



Definitions:

- ***Preventive actions are the actions which aim at eliminating the cause of a potential non-conformity or other undesirable potential situation:***
  - change request to modify the organisation of the association or consortium, its management processes including PMP
  - investments in new competences and equipments,
  - new suppliers and subcontractors

Claim global analysis of the period under review: Record of the all the claims of the period under review:

- abnormality reports
- non conformity reports
- changes request reports
- corrective actions reports
- preventive actions reports
- audit reports
- intervention reports
- acceptance reports
- ***Establishing the claims statistics versus time, per cause or type of claim***

- Finding out the possible root causes of the different claims, claim by claim (cause tree, ..)
- Establishing the curative actions
- Establishing a proposal to implement them, cost, schedule, expected results

Meeting with CDIR, QM, QRs, TRs, PMs

- At that stages, the causes come from defective processes or organisation
- Review of the analysis, causes of claims, proposed curative actions, budget, schedule and expected results.
- Decision of the direction : approved, to be modified, rejected
- Minutes of the Management review meeting

- Implement curative actions
- Check of the results
- Report to CDIR
- Evenutal loop if necessary

Glossary

- ADP, Acceptance Data Package (documentation linked with the deliverable)
- CDIR, CRPP Direction
- CL, Client, internal, external or both
- CQMS, CRPP Integrated Quality Management System
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- Validation, internal validation by hierarchy

Rel.	Date	Designation	Author	Checked
0.0.0	081110	First design for CRPP	Léonard	

MANAGEMENT PROCESS FOR IMPROVEMENT (or preventive actions)