



Broadcast Control System (BCS)

NRK 2023-1264

SSA-V Appendix 2 – Contractor solution specification
(description of the maintenance services)

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Table of Contents

1	INTRODUCTION	3
2	EXPLANATION TO THE REQUIREMENTS SPECIFICATION	3
3	INSTRUCTIONS FOR COMPLETING APPENDIX 2	3
4	GENERAL REQUIREMENTS TO BE FULFILLED BY THE CONTRACTOR	4
5	HANDLING OF INQUIRIES	6
6	COOPERATION PLAN (CLAUSE 2.1.2)	6
7	SCOPE OF THE MAINTENANCE SERVICES (CLAUSE 2.2.1)	7
7.1	USER SUPPORT (CLAUSE 2.2.4)	7
7.2	PREVENTIVE MAINTENANCE	7
7.3	CORRECTIVE MAINTENANCE	8
7.4	ERROR HANDLING (CLAUSE 2.2.5)	9
7.5	NEW VERSIONS (CLAUSE 2.2.7)	9
8	UPDATING OF DOCUMENTATION (CLAUSE 2.2.3)	10
9	INSTALLATION OF PATCHES, ETC. (CLAUSE 2.2.6)	11
10	FURTHER DEVELOPMENT (CLAUSE 2.2.8)	11
11	TRAINING	11
12	PERSONAL DATA (CLAUSE 9.3)	12
13	RESPONSIBILITIES OF AND CONTRIBUTIONS BY THE CUSTOMER (CLAUSE 6.1)	12

1 INTRODUCTION

The Contractor shall in this Appendix provide solution specification of the BCS solution in accordance with the objectives, needs, requirements, and instructions as described and specified by the Customer in SSA-V Appendix 1.

Text inserted by the Contractor should be marked with blue font.

Note: the remaining descriptions of this Appendix will be clarified during the negotiation phase.

2 EXPLANATION TO THE REQUIREMENTS SPECIFICATION

The requirement specification tables provided in Appendix 2 consists of the columns shown in the table below. Please note that the requirements specification tables shall only be filled in as part of the Contractor's response in Appendix 2.

#	Requirement	Stage	Compliance Y/P/N	Contractor's response
1				
2				

#: Requirement ID – consecutive numbering of needs/requirements within each section.

Requirement: Textual description of the need/requirement.

Stage: The column refers to which MPP stage the requirement is expected to be delivered.

Compliance:

- Y: the requirement is fulfilled
- P: the requirement is partly fulfilled
- N: the requirement is not fulfilled

Contractor's response: The Contractor's detailed description of how the need/requirement is fulfilled as well as which part(s) of the requirement are possibly not fulfilled according to the applied compliance code. Please refer to chapter 3 below for instructions for completing Appendix 2.

3 INSTRUCTIONS FOR COMPLETING APPENDIX 2

The Contractor is required to document degree of fulfilment of and compliance with the specified objectives, needs and requirements in SSA-V Appendix 1 by completing the corresponding Appendix 2.

In Appendix 2, the Contractor must for each need and requirement provide an exhaustive elaboration of how the proposed BCS solution addresses the Customer's needs and requirements. The Contractor is encouraged to add illustrations and screenshots whenever this may help the Customer to get a better understanding of how the BCS solution addresses the requirement. References to general materials such as sales and/or product brochures, product magazines and web content is not sufficient. Any relevant supplementary information may be provided as attachment(s) to Appendix 2 with clear and unambiguous reference.

Where requirement tables are used, the Contractor must answer each requirement with a confirmation by marking an "Y", "P", or "N" in the relevant column(s) under the heading "Compliance":

- If the Contractor marks the Compliance column “P”, an explanation must be given in the “Contractor’s response” column. Otherwise, the requirement is not accepted as fulfilled. Based on the explanation, the Customer will consider if the requirement is fulfilled or not.
- If the Contractor has any reservations to the requirement, this must be explained in the “Contractor’s response” column. If the Contractor will fulfil part of the requirement with one of the categories and another part with another category, then the Contractor may mark more than one category. In that case, the Contractor must be very explicit in their description in Appendix 2 about how each part of the requirement is fulfilled. The Contractor shall inform the Customer of the likely consequences of any customizations in terms of the complexity and price of any future maintenance of the standard system and customization.
- If the Contractor does not fulfil the requirement as intended by the Customer’s requirement description, but the Contractor has a workaround solution, the Contractor must mark the Compliance column “P” and describe the workaround solution in the “Contractor’s response” column.

The Contractor’s response must be sufficiently exhaustive for the Customer to assess whether the solution meets the requirement and otherwise may be considered suitable, possibly adding value, and thus form a sufficient framework for any detail specification. If the column “Contractor’s response” does not contain sufficient space for text and illustrations for certain requirements, the response may be included under each requirements table with clear and unambiguous reference to the applicable requirement ID.

Although alternative proposals are not allowed as such, this does not prevent the Customer from accepting a fulfilment of individual requirements that are not necessarily “according to the letter of the requirement” if the Customer has justified this in terms of increased performance, value, efficiency, safety, gain etc., or reduced risk and cost. Similarly, if the Contractor considers certain requirements to be particularly complex or cost-driving, the Contractor may justify this and propose and describe an alternative fulfilment.

It is the responsibility of the Contractor to ensure that all requirements are sufficiently addressed. If requirements are left unanswered or uncommented – they are to be considered as fulfilled unless otherwise explicitly stated by the Contractor.

Any limitations, demarcations, assumptions, or deviations must be clearly described in connection with the individual need and requirement in Appendix 2 to be invoked.

4 GENERAL REQUIREMENTS TO BE FULFILLED BY THE CONTRACTOR

The Customer's Broadcast Control System is a vital part of the Customer’s modernized production platform. The BCS solution provides a mission critical service for the Customer and unscheduled downtime affecting the Customer’s ability to broadcast cannot be accepted.

Furthermore, cost-efficient, and optimized support and maintenance as described in this Agreement will for the lifecycle of the BCS solution be of high importance to ensure the Customer has an up-to-date and well-functioning system.

During the duration of this maintenance and support agreement, the BCS solution will have to be adapted to the Customer's needs as part of the transformation journey.

The Contractor must provide an overall description of their understanding of the assignment and the maintenance and support services offered, including any prerequisites.

The Contractor shall describe how a combination of proactive and reactive maintenance services can enable them to guarantee uptime and transmission capability set forth in SSA-V Appendix 5.

The Contractor should offer their standard maintenance and support service agreement that, to the best extent, fits or exceeds the requirements outlined in SSA-V Appendix 1 and 5. The description of the service shall address which level of standard service agreement that best fits the Customer's need.

Contractor's response to be inserted here:

#	Requirement	Compliance Y/P/N	Contractor's response
1	The Contractor must describe how the system is kept updated at any time in cooperation and per agreement with the Customer.		
2	The Contractor must describe how they take care of their responsibility for life cycle management of the software that is necessary to maintain the agreed function and service level.		
3	The Contractor must describe how they will carry out maintenance of the software so that the solution can be kept up to date in terms of security and quality throughout the entire agreement period.		
4	If any standard software or third-party software is included in the solution, of which the Contractor has not developed itself or does not maintain itself, please describe how this will be handled by the Contractor support organization.		
5	The Contractor is responsible for quality and performance also for any standard software or third-party deliveries, and any maintenance conditions agreed between the Contractor and the third-party supplier must be attached in SSA-V Appendix 10, and the terms and conditions for the maintenance service shall be explicitly specified in a separate chapter in SSA-V Appendix 2.		
6	Present roadmap: The Contractor should at least once a year present in writing form any new functionality that will be available the next 12-24 months.		
7	The Contractor should proactively contribute to keep down cost levels associated with the operation and maintenance of the solution.		
8	<p>The Contractor should describe how release of new feature will be deployed in NRK's operations environment.</p> <ul style="list-style-type: none"> • Expectations from NRK for the release cycle • Expectations from the test and integration with other vendors • Describe information and operations about release of new feature. 		

9	Migrating: If the Agreement is terminated, assistance to migrate customer data is to be provided.
10	Interface: If the Agreement is terminated, structured interfaces for delivering data to new solution is to be provided.

5 HANDLING OF INQUIRIES

Customer's requirements related to handling of inquiries are set out below;

[Contractor's response to be inserted here:](#)

#	Requirement	Compliance Y/P/N	Contractor's response
1	<p>The Contractor must have a dedicated help line/user support making it possible for the Customer to report critical problems. The Contractor is asked to describe in SSA-V Appendix 6 the support organisation and communication channels, i.e., phone/web/e-mail.</p> <p>It is preferred that the Customer is given access to the Contractor's service management system for self-service in registering and monitoring the progress on the issues solving.</p>		
2	<p>The Customer will provide the Contractor with remote access to the relevant parts of the infrastructure, to facilitate on-line investigation on the solution.</p> <p>The Contractor must be able to use remote access for user support and troubleshooting /correction.</p> <p>Routines and toolset for remote access is to be discussed and agreed upon during the implementation phase.</p>		
3	<p>Where the Contractor does not itself supply the products (including hardware and software), the Contractor shall accept that the Customer can take direct contact with the manufacturer whenever the Customer think it is appropriate.</p>		

6 COOPERATION PLAN (CLAUSE 2.1.2)

The cooperation requirements as part of the maintenance agreement are set out in SSA-V Appendix 6.

[Contractor's response to be inserted here:](#)

7 SCOPE OF THE MAINTENANCE SERVICES (CLAUSE 2.2.1)

The following services are part of this maintenance and support agreement.

7.1 user support (clause 2.2.4)

[Contractor's response to be inserted here:](#)

#	Requirement	Compliance Y/P/N	Contractor's response
1	The Contractor must provide second- and third-line support. First line support will be handled by the Customer.		
2	The Contractor must have available qualified personnel for providing third line support and take technical support calls and on-line communication via telephone, e-mail, and the fault reporting system. The user support is to be described in SSA-V Appendix 6.		
3	The Contractor must have an option for reporting critical issues (Level A) 24/7-365, and support staff ensuring that the critical issues will be handled in accordance with SSA-V Appendix 5.		

7.2 Preventive maintenance

[Contractor's response to be inserted here:](#)

#	Requirement	Compliance Y/P/N	Contractor's response
1	The Contractor must keep updated on current OS support to ensure the Customer is not left on an EOL-branch of OS.		
2	The Contractor must continuously make security updates and patching of known vulnerabilities available to the Customer. The Customer carries out all upgrades and patching themselves.		
3	The Contractor must actively notify the Customer of events that may affect the Customer's use of the system, such as known errors and the need for upgrades and security updates. The information is to be readily available for the Customer. The Contractor must inform on when and how the error is planned to be solved and inform on whether any temporary solutions are available.		
4	The Contractor should at regular intervals (e.g., annually) perform a solution health check in cooperation with the Customer. Based on this, the Contractor shall provide a		

	plan of action to resolve any issues within a reasonable time plan.
5	When applying changes, upgrades, and maintenance to the system, it has to be done in a manner that doesn't affect the uptime and delivery of the service provided by the system.
6	The Contractor is asked to describe other preventive services that they believe are necessary for them to be able to guarantee the level of service expressed in SSA-V Appendix 5. Please inform whether these services are part of the standard service agreement and already included in the pricing. If the services are charged separately the price must be inserted in SSA-T Appendix 7.

7.3 Corrective maintenance

Contractor's response to be inserted here:

#	Requirement	Compliance Y/P/N	Contractor's response
1	Errors reported by the Customer must contain the Customer's proposal for categorizing the error (A, B or C error), as described in SSA-V clause 2.2.5. If the work with an error situation shows that the categorization is incorrect or is no longer valid, the Contractor must propose a changed categorization. Changed categorization is only valid if the Customer approves the change.		
2	The Contractor must, by agreement, deliver error reports where the Customer is affected, which describes the consequences for the customer, deviation reports and any change requests.		
3	The Contractor will make bug fix releases available to the Customer when required to fix any urgent issues.		
4	The Contractor shall provide new releases including fixes to previously reported problems and improved or new functionality to the software.		
5	The Contractor must carry out thorough tests of the software before the correction is made available for installation in the Customer's test environment. The testing must also ensure that no errors have occurred as a result of the error correction.		
6	The Contractor must maintain control of all third-party libraries and components in the solution in order to uncover security vulnerabilities and updates that are significant for the solution and ensure that errors in third-party libraries that imply the		

	need for error correction of the solution are delivered under the same conditions as error corrections in self-developed components.
7	The Contractor is obliged, without additional remuneration, to assist with the implementation of system corrections in connection with category A and B errors.

7.4 Error handling (clause 2.2.5)

Contractor's response to be inserted here:

#	Requirement	Compliance Y/P/N	Contractor's response
1	The Contractor shall provide fixes to problems and improvements to vulnerabilities for the version of the software or hardware used by Customer.		
2	The Customer wants error handling work to be initiated as soon as the error is reported and solved as soon as possible, c.f. SSA-V Appendix 5.		
3	If the Customer is in doubt as to whether the error is caused by software, equipment or the network, the Customer can demand that the Contractor implements the necessary measures for troubleshooting. The Contractor shall assist the Customer in fault finding and rectification, even if it is unclear whether the fault is the Contractor's responsibility, if the Customer requests this.		
4	The Customer will upon the Contractor's advice purchase and store critical components (hardware spare-parts) on-site to minimize the restore time on error caused by hardware. The Customer may be of help to fix hardware error upon guidance of the Contractor.		
5	The Contractor shall describe relevant support packages for equipment which does not have spare parts stored at the Customer's facility.		

7.5 New versions (clause 2.2.7)

Contractor's response to be inserted here:

#	Requirement	Compliance Y/P/N	Contractor's response
1	The Contractor must offer new versions of the software to the Customer as soon as reasonably possible after new versions become available. The parties will agree to a timetable for testing and the migration from		

	the current version with the aim of minimizing interruption to the Customer's operations.
2	The Contractor must inform the Customer in writing in reasonable time before launching a new version. The information must include changes that may significantly impact the Customer's use of the BCS solution.
3	The Contractor must support previous version of the software up to 12 months after a release of new main version.
4	All new versions should be backward compatible so that functionality that the Customer is using, or is planning to use, is not lost in the new version.
5	Upon the release of new versions, the Contractor shall ensure that the version/fix has been subject to testing, equivalently to the requirements as set forth in the SSA-T Agreement, in an environment comparable to the Customer's production platform. Documentation on such testing, including test results, should follow the release.
6	As a general rule, the Customer is responsible for the installation of system corrections and new software versions, but the Contractor shall, upon specific request from the Customer, be able to assist, or possibly take responsibility for this, in accordance with the hourly prices that are provided in SSA-T Appendix 7.
7	The Contractor shall describe their methods for delivering new versions, e.g., how often major or minor releases are provided to the Customers.

8 UPDATING OF DOCUMENTATION (CLAUSE 2.2.3)

Customer's requirements related to updating of documentation are set out below;

[Contractor's response to be inserted here:](#)

#	Requirement	Compliance Y/P/N	Contractor's response
1	The Contractor must deliver updated documentation for new versions and significant changes to the BCS solution. This update shall be part of the monthly subscription pricing as per SSA-T Appendix 7.		
2	A new version must contain a version note. The note must describe what has been changed, which upgrades, optimization, configuration changes, technical/logical sketch and error corrections have been carried out as well as a test report.		

	Correspondingly, error correction in the form of a fix/patch must be documented.
3	Customer-specific documentation and general product documentation must be made available in English.
4	For each main delivery, the Contractor must deliver safety documentation that includes: <ul style="list-style-type: none"> – Updated solution description for security – Requirements for configuration in the Customer's environment to safeguard security – A guarantee that the delivery does not contain code that could weaken the security of the solution, including viruses, back doors, unspecified/undocumented functions, or other forms of malware

9 INSTALLATION OF PATCHES, ETC. (CLAUSE 2.2.6)

If the Customer or the Customer's operational services provider shall install patches, this shall be specified here.

If the Customer permits the Contractor to deliver software rectifications in the form of a new version of the software, even if this requires upgrading the Customer's technical platform or making changes to the Customer's other systems, this shall be specified here.

[Contractor's response to be inserted here:](#)

10 FURTHER DEVELOPMENT (CLAUSE 2.2.8)

Requirements to further development and functionality/features to be implemented as part of v0.5, v1.0, and v2.0 are set out in SSA-T Appendix 1. The Contractor shall describe how operations and maintenance of the BCS solution will be carried out during the development of new functionality/features.

[Contractor's response to be inserted here:](#)

11 TRAINING

Customer's requirements related to training are set out below;

[Contractor's response to be inserted here:](#)

#	Requirement	Compliance Y/P/N	Contractor's response
1	The Contractor must provide, upon request, functional and/or technical training of the		

Customer's internal experts/super users on the software and on the problem reporting procedures and problem analysis tools.

12 PERSONAL DATA (CLAUSE 9.3)

Customer's requirements related to general external legal requirements and measures are set out below;

[Contractor's response to be inserted here:](#)

#	Requirement	Compliance Y/P/N	Contractor's response
1	The Contractor shall handle personal data in accordance with applicable Norwegian laws and regulations. The Contractor will have to comply and sign a data processor agreement pursuant to GDPR at the time of contract signing (see Attachment 2).		

13 RESPONSIBILITIES OF AND CONTRIBUTIONS BY THE CUSTOMER (CLAUSE 6.1)

The Contractor can stipulate further requirements concerning the Customer's contributions here.

[Contractor's response to be inserted here:](#)