



EUROPEAN SOUTHERN OBSERVATORY

Organisation Européenne pour des Recherches Astronomiques dans l'Hémisphère Austral  
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# VERY LARGE TELESCOPE INSTRUMENTATION DIVISION

## New General detector Controller

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## CHANGE RECORD

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# **1 Introduction**

## **1.1 Purpose**

This document presents the list of documents relevant to to the ESO Next Generation detector Controller (NGC) project.

All the NGC project documents shall refer to this document for any reference to documentation relevant to the NGC project.

## 2 Applicable and Reference Documents

Applicable documents form part of the documentation to the extent specified herein. In the event of conflict between the documents referenced herein and the content of the NGC document, the content of NGC document shall be considered as a superseding requirement.

Reference documents contain additional information required to fully understand the terminology used, the software environment in which NGC shall be integrated and the characteristics of the interface to external systems.

This document contains the complete list of the documentation referenced by or applicable to the NGC project. It is up to the different NGC documents to define a document as "applicable" or "reference", referring to them placing a "A" or a "R" before their id, as it appears in the list below.

### 2.1 NGC

D6	NGC Requirements Specification, VLT-SPE-ESO-13660-3207, 0.3
D7	NGC Software Requirements, VLT-SPE-ESO-13660-3670, 1.0
D8	Next General Detector Controller (NGC) Technical Report, VLT-TRE-ESO-13660-3900
D9	NGC Base Software - Design Description, VLT-SPE-ESO-13660-3836, 0.1
D10	NGC Control Software System - Optical Instruments - High Level Software Design Description, VLT-SPE-ESO-13660-3835, 1.0
D11	NGC - Infrared Detector Control Software - Design Description, VLT-SPE-ESO-13660-3837, 0.1
D65	NGC Project Documentation, VLT-LIS-ESO-13660-3906
D63	NGC Project Glossary, VLT-LIS-ESO-13660-3907
D64	NGC Project Acronyms, VLT-LIS-ESO-13660-3908
D62	C.Cumani, A.Balestra, J.Stegmeier "Software for the ESO New General detector Controller", proceedings of the "Scientific Detector Workshop 2005", Taormina, Italy, June 20-24, 2005, in press

### 2.2 Previous detector controllers

D13	FIERA CCD Controller Software Functional Specifications, VLT-SPE-ESO-13640-1266, 1.0
D14	FIERA CCD Controller Software Maintenance Manual, VLT-SPE-ESO-13640-1707, 2.0
D15	FIERA CCD Controller Software User Manual, VLT-MAN-ESO-13640-1388, 3.0
D16	IRACE-DCS User Manual, VLT-MAN-ESO-14100-1878, 1.4

## 2.3 Hardware Interfaces

D18	Pulpo User Manual, April 1998, <a href="http://www.eso.org/projects/odt/pulpo/pulpo.html">www.eso.org/projects/odt/pulpo/pulpo.html</a>
D19	PULPO2 User Manual, VLT-TRE-ESO-13630-3490, 2.0
D20	SPARTA Adaptive Optics Real Time Computer Platform Specifications for NGC, VLT-SPE-ESO-16100-3729, 1.0
D21	VLT Specifications for NGC, VLT-SPE-ESO-nnnnn-xxxx
D22	Use of Gigabit Ethernet in an Instrumentation Local Area Network, VLT-TRE-ESO-17120-3407, 2.0
D70	VLT Time Reference System Time, GEN-SPE-ESO-00000-0949, 2.0

## 2.4 VLTSW

D24	VLT Software Requirements Specs, VLT-SPE-ESO-10000-0011, 2.0
D25	VLT Software Programming Standards, VLT-PRO-ESO-10000-0228, 1.0
D26	VLT Software - Guidelines for the Development of VLT Application Software, VLT-MAN-ESO-17210-0667, 1.2
D27	VLT Instrumentation Software Specification, VLT-SPE-ESO-17212-0001, 4.0
D28	INS Common Software Specification, VLT-SPE-ESO-17240-0385, 3.0
D29	VLT Software Configuration Control Plan, VLT-PLA-ESO-00000-0004, 1.0
D30	VLTSW Basic Tools and Working Environment- Guidelines, VLT-MAN-ESO-17000-2972, 2.0
D31	VLT Software Installation Tool for VLT, VLT-MAN-ESO-17240-1913, 3.0
D32	CCS User Manual, VLT-MAN-ESO-17210-0619, 2.4
D33	Extended CCS User Manual, VLT-MAN-ESO-17210-0770, 1.8
D34	CCS On-Line Data Base Loader User Manual, VLT-MAN-ESO-17210-0707, 1.6
D35	CCS Event Tool Kit - EVH User Manual, VLT-MAN-ESO-17210-0771, 1.8
D36	INS/Data Transfer Library dxf - User Manual, VLT-MAN-ESO-17240-0637, 3.0
D37	Data Interface Control Document, GEN-SPE-ESO-19400-0794, 3.0
D38	ESO Graphical User Interface Common Conventions, VLT-SPE-ESO-00000-0266, 1.0
D39	VLT Software Graphical User Interface User Manual, VLT-MAN-ESO-17210-0690, 5.0
D40	Real Time Display - User Manual, VLT-MAN-ESO-17240-0866, 2.8
D41	Tools for Automated Testing User Manual, VLT-MAN-ESO-17200-0908, 1.4
D42	Configuration Management Module User Manual, VLT-MAN-ESO-17200-0780, 2.0
D43	VLT Software - Telescope Control System, VLT-MAN-ESO-17230-0942, 2.0
D44	Template Instrument Software - User and Maintenance Manual, VLT-MAN-ESO-17240-1973, 5.0
D71	VLT Software Test Plan, VLT-PLA-ESO-00000-0007, 0.3

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## 2.5 Instrumentation

D46	APE Control Software Requirements Specification, ELT-SPE-ESO-04680-0002, 1.0
D47	X-shooter Final Design Report CCD Detector and Acquisition System Design, XSH-TRE-ESO-6000-0002, 1.0
D48	OmegaCAM Detector System Technical Report, VST-TRE-ESO-23150-0008, 2.1

## 2.6 Languages

D50	UML Specifications, <a href="http://www.omg.org">www.omg.org</a>
D51	M.Fowler , UML Distilled, Third Edition

## 2.7 Third party products

D53	Doxygen Homepage, <a href="http://www.doxygen.org">www.doxygen.org</a>
D54	Enterprise Architect, <a href="http://www.sparxsystems.com.au">www.sparxsystems.com.au</a>
D55	Telelogic Doors, <a href="http://www.telelogic.com">www.telelogic.com</a>

## 2.8 Literature

D57	Claudio Cumani, Karl-Heinz Mantel, "Phase resolved high speed photometry and spectroscopy of Pulsars", <i>Experimental Astronomy</i> 11: 145-150 (2001), N/A,
D58	J.C. Cuillandre et al., "Va-et-Vient spectroscopy: a new mode for faint object CCD spectroscopy with very large telescopes", <i>Astron. Astrophys</i> , 281:603-612 (1994), N/A
D59	Karl Glazebrook, Joss Bland-Hawthorn, "Microslit Nod-shuffle Spectroscopy - a technique for achieving very high densities of spectra", <i>Publications of the Astronomical Society of the Pacific</i> , 113:197-214 (2001), N/A
D60	Martin M. Roth, Thomas Fechner, Dieter Wolter, Andreas Kelz, Thomas Becker, "Ultra-deep optical Spectroscopy with PMAS, using the Nod-and-Shuffle Technique", <i>Proc. Scientific Detectors for Astronomy, Workshop Waimea (Hawaii)</i> , 2002, N/A
D61	Piero Rosati, "Nodding and Chopping", <i>FLAMES Users Workshop, ESO Garching</i> , 9-10 July 2001, N/A

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