Pulsar Pipeline Checklist

	tasks	Developer
BG/P	TAB Pipeline	John Romain, Jan David Mol, Rob van Nieuwpoort
	Design/preparatory work for BG/P 2nd transpose	John Romain, Jan David Mol, Rob van Nieuwpoort
	Implement BG/P 2nd data transpose	Jan David Mol
	Document "new" BFout stream (post 2nd transpose)	Jan David Mol
	Test and bug fix 2nd transpose	Jan David Mol, John Romain
	Integrate phase correction into TAB module	Jan David Mol, John
	Implement Phase-Frequency correction due to cable lengths	John Romain, Michiel B.
	Implement LOFAR center as LBA center position of station CS002	Chris B.
	Implment on-the-fly squashing of channels per subbands for BF (IM+BF obs)	Jan David Mol
SAS / MAC/MoM	Integrate of TAB module into SAS/MAC	Jan David Mol, Ruud Overeem
	Offline Pipeline connection to SAS/MAC	John Swinbank, Ken Anderson, A2, Ruud Overeem
	MoM connection to SAS/MAC	Jason, Hanno, Antonis
	Multiple BF observations with MOM-templates	Nico, Jason, A2
	Processing multiple BF MOM-observations automatically (shell script pipe)	A2
	Multiple Imaging observations with MOM-templates	A2, George, John McKean, Roberto Pizzo
	Multi-Beam IM/BF + piggy-backing obs w/MOM-templates	A2
BF2H5 online version	BeamFormed Writer (1st version to OLD ICD spec)	Alwin de Jong
	Test svn externals when building LOFARSOFT with the DAL	Lars Baehren, Marcel Loose, Alwin de Jong
	Integrate DAL classes into BF2H5	
	Integrate parset reader into BF writer w/in LOFARSOFT	Alwin de Jong, Jan David Mol
	Integrate new BF H5 data format (ICD) into BF2H5 (raw data)	
	Integrate new BF H5 data format (ICD) into BF2H5 (BG/P out data)	Jan David Mol
	Test writing 248 subands at once to check efficiency	
BF ICD	Create mock BF H5 files with 4 types of data storage containers	A2
	Benchmark (DAL C++) 4 storage types to choose optimum BF container	A2, L. Baehren
	Finalize BF ICD	A2, L. Baehren, J. Romain, JD Mol, J. Hessels, K. Anderson
	Identify source of metadata values (& calculations)	Hanno, R. Overeem, J. Hessels, M. Wise, Alwin de Jong, A2, B. Stappers
	Profile BF Observations (& Pipeline) for typical stats on sizes	J. Hessels, B. Stappers, M. Wise
DAL	Create DAL classes for BF metadata and structure (abide by ICD)	Lars Baehren, A2
	Create DAL methods to access data from BF structure (abide by ICD)	Lars Baehren, A2
	Wrap BF DAL classes and methods with Python for PyDAL	A2, Lars Baehren, K. Anderson
	Ongoing PyDAL updates and bugfixes	A2, Lars Baehren, Frank B.
	Integrate HDF5 into file I/O for Presto/TEMPO/etc	A2
Pulsar Tools	Daily build of USG repository on offline cluster	Arno, Mike Wise, Lars
	Integrate FFTW-3.1.2 into cmake	A2
	Integrate PPGPLOT into cmake	A2
	Interate TEMPO into cmake	A2
	Integrate PRESTO into cmake	A2; Lars
	Integrate SIGPROC into cmake	A2
	Integrate PSRCHIV into cmake	A2
	Integrate SSPS (Single Pulse sw and docs) into cmake	A2, Thijs Coenen
	Integrate PSRDADA into cmake	A2
	Integrate DSPSR into cmake	A2
	Test software installation/components on new cluster	A2, J. Hessels, B. Stappers
	Test software installation/components on user machines	Pulsar Group
	Integate "convert" (bf2presto) into cmake	A2

	Update/maintain/expand "convert" (bf2presto) program for BF observations	Tom Hassall, A2, Jan David Mol
	Assist Pulsar Group with integration of tools/scripts into cmake & USG	A2; Lars
	Maintain/upgrade Pulsar shell script pipeline	A2, Pulsar Group
Pulsar Pipeline Integration	Design Pulsar Pipeline for basic observing modes	J. Hessels, B. Stappers, J. van Leeuwen, A2, M. Wise
	Decide how to distribute the Pulsar Pipeline	M. Wise, L. Baehren, J. Hessels, A2, J. Swinbank
	Implement Pulsar Pipeline Design within the iPython Framework	A2, K. Anderson, J. Swinbank
	Pipeline Testing	A2, K. Anderson, J. Swinbank, J. Hessels, B. Stappers, J. Van Leeuwen
	Release Pulsar Pipeline	M. Wise
	Design Pulsar Pipeline(s) for other observing modes including survey	J. Hessels, B. Stappers, J. van Leeuwen, A2, M. Wise
	Integrate prototype Pulsar Search Pipeline (script) into USG (summer student	A2, Vlad
	Pulsar Search Pipeline - testing - upgrade with SSPS software	Thijs
BF2H5 offline version	Extraction process of parameterDB out of LOFARSOFT & distribute offline	Mike to assign this issue to different group
	Create standalone BF2H5 tool	Alwin de Jong
	UDP reader/interpreter library (UK)	Alessio, Aris, Chris, Fred, Ben
	Integrate PELICAN & PELICAN-LOFAR into USG	Lars
	TCP-packet convert module for Pelican	Jan David
	HDF5 data writer module for Pelican	Jan David
Archive	Sync Archive schema with BF ICD	A. Renting, A2, L. Baehren, M. Wise, R. Overeem
	Archive Pulsar raw data	A. Renting
	Archive Pulsar Pipeline Processed data	A. Renting, A2

Commissioner	Expected date of readiness	remarks
Jan David Mol, Jason Hessels	Done in early 2009	
	Done	John, Jan David and Rob have completed the discussions; 4-phased for transpose prep, then transp
John Romain, Jan David Mol	several weeks (mid-Apr)	Rob will no longer be involved; Jan David will implement the entirety of the 2nd transpose
Jan David Mol	1-2 days	
Jan David Mol, Jason Hessels	1-2 weeks	
JD, Jason		
Michiel B., Jason Hessels		
Chris B.		
Jason, Jan David Mol		
Jan David Mol, Ruud Overeem		Need to ask Jan David for a status on this issue; rumor has it that this is working
John Swinbank, Ken Anderson, A2, Ruud Overeem		John is working with Ruud on the messaging/communication aspect
A2, Jason		
A2, Jason		
Roberto Pizao, George, John McKean		
A2, Jason, George		
Alwin de Jong, J. Hessels	Done	Working again; can read parset file and feed keys to header; works w/o UDP
Alwin de Jong, Marcel	in process, 1-week	Lars has spoken to Marcel and emailed relevant info; Lars to touch base with Marcel to implement ir
Alwin de Jong		
A2, J. Hessels		
A2, J. Hessels, Jan David Mol		
Jason		
A2	Done	4 types are: 1D arrays, ND arrays, 1D tables, ND tables (note ND arrays are memory limited)
A2, Jason Hessels	1-2 weeks	DAL is missing Array/Table real() methods from sub-groups; Lars to add functionality before benchm
A2, Lars Baehren, J. Romain, JD Mol, J. Hessels, M. Wise		John Romain's comments and James Anderson's comments integrated; moved Coord Group; may c
;		Put this as an adgenda item for discussion during the next BF status meeting
		should be a chart in the ICD to view typical data sizes for types of observations; waiting on Jason
	in process	implemented three highest tiers of H5 structure (not yet lowest tier where the data structures are)
The Pulsar Group		
	in process	need to formalize the to-do and bug list
The Pulsar Group		
		Mike to start up the process of asking Arno to include this in a daily build
	Done	
	Done	note, depends on system install of PGPLOT
	Done	workaround for problems with reading files with line length > 70 chars; fix requested to developer
A2 fixing seg fault & other issues on new cluster build	1-2 weeks	accelsearch sef fault (non LOFAR data); cmake external dependencies can be made smarter (Lars)
Ben Stappers, Joeri		
Ben Stappers		Does not build on the Mac (needs specific version of X11)
A2, Thijs Coenen, Joeri		Does not build on the Mac (needs specific version of X11)
Ben Stappers		
Ben Stappers		
The Pulsar Group	in process	fixing problems as they unfold
	in process; low priority	Ramesh would like a copy of the software suite within cmake; TEMPO doesn't build on Mac OS 10.6
A2, Tom Hassall		

A2, Tom Hassall, Jan David Mol, J. Hessels		Tom needs to check in his version into the ISG repository
A2, Tom Hassall		A2 updated to use 8-cores per mode; speed increase 5-6 times
The Pulsar Group		create use-cases and map these to tools/parameter settings; start at PBW #6 do we need to integrate the Transient S/W repository with the USG S/W repository?
A2, K. Anderson, J. Swinbank A2, J. Hessels, B. Stappers, J. Van Leeuwen		current SH scripts pipeline described and sent to Ken; John & Ken to meet about iPhython Framewo
A2, Vlad Thijs + Pulsar Group		not needed for completion of first pipelline release
Masaya, James Anderson Alessio, Aris, Chris Lars Jan David, Oxford group Jan David, Lars, A2, Oxford group	1st version Apr 7th	on target to meet one month deadline from start-up of project
A. Renting, A2, J. Hessels A. Renting, A2, J. Hessels, M. Wise A. Renting, A2, J. Hessels, M. Wise	in process	meetings took place to mesh the LOFAR ICD with the Archive schema