

CF (and 1 DAAC) SDP (PGS) Toolkit parent L3 RbRs to be loaded into RTM.
 The attributes req_category and req_type have been added since the version A update of this CCR.

Table A: Table A shows the new RBRs that shall be added to the RTM MAIN database by this CCR.

This table is added to this Version C CCR to reflect the new TK RBRs. It was not present in Version B.

BR	Rel	RBR seg	S Verif Method	S Verif Stat	A verif Method	A verif Stat	Interp	req_category	req_type	text
<u>GS-0458#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall use configuration-controlled calibration coefficients and selected engineering data to generate calibrated ancillary data products necessary as input to the generation of Level 1 Standard Products in a timeframe that assures that production schedules for all products can be met.</u>
<u>GS-0470#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>	<u>B: AM-1, COLOR</u>	<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to produce each Standard Product as specified in that product's Standard Product specification.</u>
<u>GS-0470#TK5a</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>	<u>B: AM-1, COLOR</u>	<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to produce each Standard Product as specified in that product's Standard Product specification.</u>
<u>GS-0470#TK5b</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>	<u>B: AM-1, COLOR</u>	<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to produce each Standard Product as specified in that product's Standard Product specification.</u>
<u>GS-0490#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to access and use, for the generation of Standard Products, information such as:</u> <u>a. Digital terrain map databases</u> <u>b. Land/sea databases</u> <u>c. Climatology databases</u> <u>d. Digital political map databases</u>
<u>GS-0510#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to generate metadata (see Appendix C) according to the algorithms provided by the scientists and associate this metadata with each Standard Product generated.</u>
<u>GS-0520#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to generate data products from any single data input or combination of data inputs according to the algorithms provided by the scientists.</u>

<u>GS-0602#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall have the capability to accept POSIX-compliant science algorithms and compile algorithm source code written in a standard programming language (e.g., Fortran, C, Ada).
<u>GS-0970#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide file access subroutines that enforce compliance with the adopted standard ECS formats.
<u>GS-0980#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide job control routines that provide all required task parameters to the Standard Product software.
<u>GS-0990#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide error logging subroutines for use by Standard Product software in notifying the system operator of conditions requiring their attention.
<u>GS-1000#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide error logging subroutines for use by Standard Product software in notifying users of conditions requiring their attention.
<u>GS-1010#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide mass storage allocation subroutines that provide algorithms with a means for dynamic allocation of storage for temporary files.
<u>GS-1015#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide ancillary data access subroutines that provide Standard Product software access to ephemeris data (e.g., solar, lunar, and satellite ephemeris), Earth rotation data, and time and position measurement data. These subroutines shall perform operations such as: a. Interpolation b. Extrapolation c. Coordinate system conversion
<u>GS-1020#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide mathematical libraries including: a. Linear algebra and analysis (e.g., LINPAC, IMSL) b. Statistical calculations (e.g., SAS, SPSS)
<u>GS-1025#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide a Science Processing Library containing routines such as: a. Image processing routines b. Data visualization routines c. Graphics routines
<u>GS-1030#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide a toolkit to the SCF containing versions of the routines specified in requirements PGS-097 to PGS-1020.
<u>GS-1050#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide the capability to perform both automatic and manual QA of generated products.

<u>GS-1100#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to accept product quality data input.</u>
<u>GS-1315#TK5</u>	<u>TK5</u>	<u>SDPS</u>	<u>analysis</u>	<u>un-verified</u>	<u>analysis</u>	<u>un-verified</u>		<u>mission essential</u>	<u>performance</u>	<u>Each PGS shall have the capacity to support I/O to temporary and intermediate storage or multiple passes over input products as required by individual science algorithm</u>
<u>GS-0458#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall use configuration-controlled calibration coefficients and selected engineering data to generate calibrated ancillary data products necessary as input to the generation of Level 1 Standard Products in a timeframe that assures that production schedules for all products can be met.</u>
<u>GS-0490#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to access and use, for the generation of Standard Products, information such as:</u> <u>a. Digital terrain map databases</u> <u>b. Land/sea databases</u> <u>c. Climatology databases</u> <u>d. Digital political map databases</u>
<u>GS-0510#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to generate metadata (see Appendix C) according to the algorithms provided by the scientists and associate this metadata with each Standard Product generated.</u>
<u>GS-0520#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to generate data products from any single data input or combination of data inputs according to the algorithms provided by the scientists.</u>
<u>GS-0602#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall have the capability to accept POSIX-compliant science algorithms and compile algorithm source code written in a standard programming language (e.g., Fortran, C, Ada).</u>
<u>GS-0970#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall provide file access subroutines that enforce compliance with the adopted standard ECS formats.</u>
<u>GS-0980#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall provide job control routines that provide all required task parameters to the Standard Product software.</u>
<u>GS-0990#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall provide error logging subroutines for use by Standard Product software in notifying the system operator of conditions requiring their attention.</u>
<u>GS-1000#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	<u>The PGS shall provide error logging subroutines for use by Standard Product software in notifying users of conditions requiring their attention.</u>

<u>GS-1010#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide mass storage allocation subroutines that provide algorithms with a means for dynamic allocation of storage for temporary files.
<u>GS-1015#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide ancillary data access subroutines that provide Standard Product software access to ephemeris data (e.g., solar, lunar, and satellite ephemeris), Earth rotation data, and time and position measurement data. These subroutines shall perform operations such as: a. Interpolation b. Extrapolation c. Coordinate system conversion
<u>GS-1020#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide mathematical libraries including: a. Linear algebra and analysis (e.g., LINPAC, IMSL) b. Statistical calculations (e.g., SAS, SPSS)
<u>GS-1025#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide a Science Processing Library containing routines such as: a. Image processing routines b. Data visualization routines c. Graphics routines
<u>GS-1030#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide a toolkit to the SCF containing versions of the routines specified in requirements PGS-09' to PGS-1020.
<u>GS-1050#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide the capability to perform both automatic and manual QA of generated products.
<u>GS-1100#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall have the capability to accept product quality data input.
<u>GS-1315#TK5a</u>	<u>TK5a</u>	<u>SDPS</u>	<u>analysis</u>	<u>un-verified</u>	<u>analysis</u>	<u>un-verified</u>		<u>mission essential</u>	<u>performance</u>	Each PGS shall have the capacity to support I/O to temporary and intermediate storage or multiple passes over input products as required by individual science algorithm
<u>GS-0458#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall use configuration-controlled calibration coefficients and selected engineering data to generate calibrated ancillary data products necessary as input to the generation of Level 1 Standard Products in a timeframe that assures that production schedules for all products can be met.

<u>GS-0490#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall have the capability to access and use, for the generation of Standard Products, information such as: a. <u>Digital terrain map databases</u> b. <u>Land/sea databases</u> c. <u>Climatology databases</u> d. <u>Digital political map databases</u>
<u>GS-0510#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall have the capability to generate metadata (see <u>Appendix C</u>) according to the algorithms provided by the scientists and associate this metadata with each Standard Product generated.
<u>GS-0520#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall have the capability to generate data products from any single data input or combination of data inputs according to the algorithms provided by the scientists.
<u>GS-0602#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall have the capability to accept POSIX-compliant science algorithms and compile algorithm source code written in a standard programming language (e.g., <u>Fortran, C, Ada</u>).
<u>GS-0970#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide file access subroutines that enforce compliance with the adopted standard ECS formats.
<u>GS-0980#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide job control routines that provide all required task parameters to the Standard Product software.
<u>GS-0990#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide error logging subroutines for use by Standard Product software in notifying the system operator of conditions requiring their attention.
<u>GS-1000#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide error logging subroutines for use by Standard Product software in notifying users of conditions requiring their attention.
<u>GS-1010#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide mass storage allocation subroutines that provide algorithms with a means for dynamic allocation of storage for temporary files.
<u>GS-1015#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide ancillary data access subroutines that provide Standard Product software access to ephemeris data (e.g., <u>solar, lunar, and satellite ephemeris</u>), <u>Earth rotation data, and time and position measurement data</u> . These subroutines shall perform operations such as: a. <u>Interpolation</u> b. <u>Extrapolation</u> c. <u>Coordinate system conversion</u>

<u>GS-1020#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide mathematical libraries including: a. <u>Linear algebra and analysis (e.g., LINPAC, IMSL)</u> b. <u>Statistical calculations (e.g., SAS, SPSS)</u>
<u>GS-1025#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide a Science Processing Library containing routines such as: a. <u>Image processing routines</u> b. <u>Data visualization routines</u> c. <u>Graphics routines</u>
<u>GS-1030#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide a toolkit to the SCF containing versions of the routines specified in requirements <u>PGS-09</u> to <u>PGS-1020</u> .
<u>GS-1050#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall provide the capability to perform both automatic and manual QA of generated products.
<u>GS-1100#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>test</u>	<u>un-verified</u>	<u>test</u>	<u>un-verified</u>		<u>mission essential</u>	<u>functional</u>	The PGS shall have the capability to accept product quality data input.
<u>GS-1315#TK5b</u>	<u>TK5b</u>	<u>SDPS</u>	<u>analysis</u>	<u>un-verified</u>	<u>analysis</u>	<u>un-verified</u>		<u>mission essential</u>	<u>performance</u>	Each PGS shall have the capacity to support I/O to temporary and intermediate storage or multiple passes over input products as required by individual science algorithm

able B: Table B shows the link table for the Level_3 requirements linkage to Toolkit RBR requirements that shall be created by this CCR. A analysis of the RTM database shows that the non-Toolkit RBR requirements that are #A and #B types are currently mapped to the rresponding Level_3 requirements.

his Version C is different from Version B in that the RBR #A and #B requirements have been remove since the are currently mapped in RTM. Requirement PGS-0530#A is deleted from F&PRS and is therefore deleted from this CCR. PGS-0458#A does not exist in RTM and hence is removed from this CCR (all level_4 mappings are removed well). Only the Toolkit requirements are linked here.

<u>L3 RQT_Id</u>	<u>RBR RQT_Id</u>
PGS-0458	<u>PGS-0458#TK5</u>
PGS-0458	<u>PGS-0458#TK5a</u>
PGS-0458	<u>PGS-0458#TK5b</u>
PGS-0470	<u>PGS-0470#TK5</u>
PGS-0470	<u>PGS-0470#TK5a</u>
PGS-0470	<u>PGS-0470#TK5b</u>
PGS-0490	<u>PGS-0490#TK5</u>
PGS-0490	<u>PGS-0490#TK5a</u>
PGS-0490	<u>PGS-0490#TK5b</u>
PGS-0510	<u>PGS-0510#TK5</u>
PGS-0510	<u>PGS-0510#TK5a</u>
PGS-0510	<u>PGS-0510#TK5b</u>
PGS-0520	<u>PGS-0520#TK5</u>
PGS-0520	<u>PGS-0520#TK5</u>
PGS-0520	<u>PGS-0520#TK5a</u>
PGS-0520	<u>PGS-0520#TK5a</u>
PGS-0520	<u>PGS-0520#TK5b</u>
PGS-0520	<u>PGS-0520#TK5b</u>
PGS-0602	<u>PGS-0602#TK5</u>
PGS-0602	<u>PGS-0602#TK5a</u>
PGS-0602	<u>PGS-0602#TK5b</u>
PGS-0970	<u>PGS-0970#TK5</u>
PGS-0970	<u>PGS-0970#TK5a</u>
PGS-0970	<u>PGS-0970#TK5a</u>
PGS-0970	<u>PGS-0970#TK5b</u>
PGS-0970	<u>PGS-0970#TK5b</u>
PGS-0980	<u>PGS-0980#TK5</u>
PGS-0980	<u>PGS-0980#TK5a</u>
PGS-0980	<u>PGS-0980#TK5b</u>
PGS-0990	<u>PGS-0990#TK5</u>

PGS-0990	<u>PGS-0990#TK5a</u>
PGS-0990	<u>PGS-0990#TK5b</u>
PGS-1000	<u>PGS-1000#TK5</u>
PGS-1000	<u>PGS-1000#TK5a</u>
PGS-1000	<u>PGS-1000#TK5b</u>
PGS-1010	<u>PGS-1010#TK5</u>
PGS-1010	<u>PGS-1010#TK5a</u>
PGS-1010	<u>PGS-1010#TK5b</u>
PGS-1015	<u>PGS-1015#TK5</u>
PGS-1015	<u>PGS-1015#TK5a</u>
PGS-1015	<u>PGS-1015#TK5a</u>
PGS-1015	<u>PGS-1015#TK5b</u>
PGS-1015	<u>PGS-1015#TK5b</u>
PGS-1020	<u>PGS-1020#TK5</u>
PGS-1020	<u>PGS-1020#TK5a</u>
PGS-1020	<u>PGS-1020#TK5b</u>
PGS-1025	<u>PGS-1025#TK5</u>
PGS-1025	<u>PGS-1025#TK5a</u>
PGS-1025	<u>PGS-1025#TK5b</u>
PGS-1030	<u>PGS-1030#TK5</u>
PGS-1030	<u>PGS-1030#TK5a</u>
PGS-1030	<u>PGS-1030#TK5b</u>
PGS-1050	<u>PGS-1050#TK5</u>
PGS-1050	<u>PGS-1050#TK5a</u>
PGS-1050	<u>PGS-1050#TK5b</u>
PGS-1100	<u>PGS-1100#TK5</u>
PGS-1100	<u>PGS-1100#TK5a</u>
PGS-1100	<u>PGS-1100#TK5b</u>
PGS-1315	<u>PGS-1315#TK5</u>
PGS-1315	<u>PGS-1315#TK5a</u>
PGS-1315	<u>PGS-1315#TK5b</u>