PTSC Review of Tag Mask Validation Code Request Guidance

Action from 2019 PTSC Meeting: *PTAGIS will forward language to the PTSC for review that better describes the goals of the tag mask validation process to prevent misinterpretation*

Deliverable: add language to the landing page to request a new Tag Mask validation code within the new PTAGIS website (*Figure 1*). The PTSC will review and approve this language as it describes the validation and the process for requesting a new code.
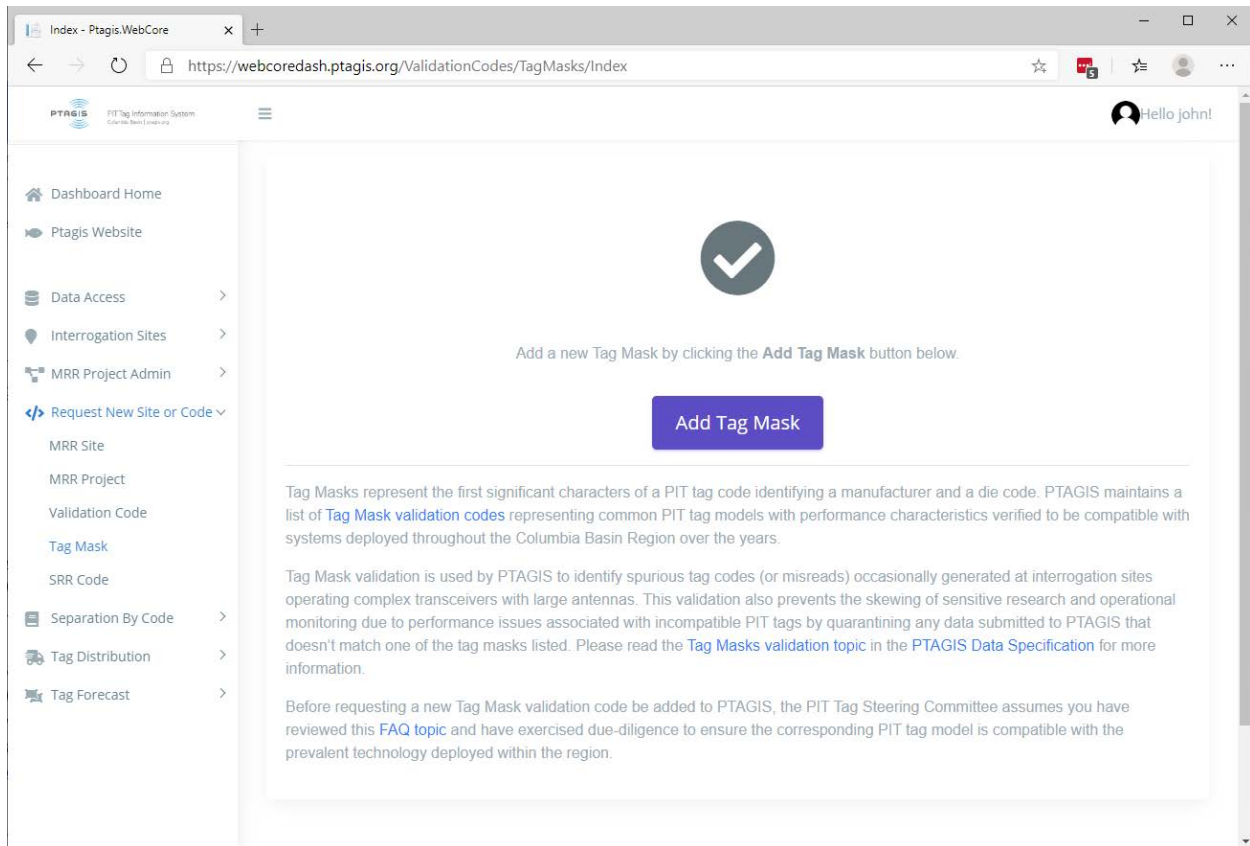

Figure 1. Landing Page on new PTAGIS Website to Request a new Tag Mask Validation Code

Proposed language for PTSC Review from landing page (*Figure 1*):

Tag Masks represent the first significant characters of a PIT tag code identifying a manufacturer and a die code. PTAGIS maintains a list of Tag Mask validation codes representing common PIT tag models with performance characteristics verified to be compatible with systems deployed throughout the Columbia Basin Region over the years.

Tag Mask validation is used by PTAGIS to identify spurious tag codes (or misreads) occasionally generated at interrogation sites operating complex transceivers with large antennas. This validation also prevents the skewing of sensitive research and

operational monitoring due to performance issues associated with incompatible PIT tags by quarantining any data submitted to PTAGIS that doesn't match one of the tag masks listed. Please read the Tag Masks validation topic in the PTAGIS Data Specification for more information.

Before requesting a new Tag Mask validation code be added to PTAGIS, the PIT Tag Steering Committee assumes you have reviewed this FAQ topic and have exercised due-diligence to ensure the corresponding PIT tag model is compatible with the prevalent technology deployed within the region.

Clicking on the *FAQ Topic* link in the language above, will display this topic – please also review:

How do I select a PIT tag to purchase?

With the increased variety of PIT tags available to Columbia Basin researchers, it is important to recognize not all PIT tags have the same performance characteristics. Performance characteristics of PIT tags can impact your projects and the projects of other researchers using PIT tag infrastructure in the Columbia Basin. If a tag has less of a chance of being detected, then research results could be skewed. If a tag is too powerful and overwhelms tags already in the system, it could affect others' research.

The PIT Tag Steering Committee and PTAGIS strongly recommends tag performance be evaluated before researchers decide to purchase and release new PIT tags in the Columbia Basin.

Some organizations that purchase large amounts of PIT tags every year have contracted with PSMFC-PTAGIS to conduct rigorous testing of candidate PIT tags to inform the procurement process. The most recent Comprehensive PIT Tag Evaluations (CPTE) were conducted in 2011, 2014 and 2017. The tags that were selected for purchase as result of these CPTEs are listed in the table below, which is updated as new CPTEs are completed.

Standard Tags		
General Tag Size	**Tag Model Selected for Purchase**	**CPTE Test Year**
12mm x 2mm	Biomark APT12	2017
12mm x 2mm	Biomark HPT12	2014
12mm x 2mm	Destron-Fearing/Biomark SST-1	2011
9mm x 2mm	Biomark HPT9	2017
9mm x 2mm	RFID Solutions PT300-1	2011

Specialty (Skinny) Tags*		
General Tag Size	**Tag Model Selected for Purchase**	**CPTE Test Year**
10mm x 1.4mm	Biomark MiniHPT10	2017
10mm x 1.4mm	EID/Trovan ID-0162A10	2017
10mm x 1.4mm	EID/Trovan ID-1162A10	2017

*Specialty tags are occasionally evaluated during CPTE testing. Specialty tags are not typically purchased and stocked. Of the specialty tags tested these are the top performers. Specialty tags, while having characteristics that make them desirable in particular research applications, might not have the readability of standard tags.

These are not the only tags in use in the Columbia Basin, and it is not required that you use one of these tags. It is recommended that you carefully select a tag that meets your project needs and will perform well in current PTAGIS infrastructure.

If you are interested in working with PSMFC-PTAGIS to conduct CPTEs for your procurement process, please contact Don Warf at dlwarf@psmfc.org.

If you elect to purchase and use a tag that is new to the Columbia Basin, please be aware that you will need to request that the new tag mask be added to the PTAGIS tag mask validation codes. The tag mask validation codes are used to screen misreads and spurious tags from the reporting system. Please see article # 7 in the June 2014 PTAGIS newsletter for more information about tag mask validation in PTAGIS.

Form on new PTAGIS Website (Figure 2) to complete new Tag Mask validation code request:

Figure 2. Form to request new tag mask validation code