



The GCC Guideline on the Specifications for Provision of an Electronic Submission for a Veterinary Medicinal Product (VNeS)

Version 4.1

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4.0	Executive Directorate of Regulatory Affairs	13 July 2021	Update version and Align with Validation Criteria versioning
4.1	Executive Directorate of Regulatory Affairs	10 November 2021	Update Validation Criteria

What is New in Version No. 4.1?

The following table shows the update to the previous version:

Section	Description of change
1.6. Related documents	<u>Update:</u> - 1-c: Critical Summaries

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1 INTRODUCTION

This document specifies provision of an electronic submission (e-submission) for a veterinary medicinal product; This Guidance Document is intended to assist applicants and regulators with submissions of dossiers in electronic format. It specifies the basic parameters required for an acceptable electronic submission.

This document is conformed to the recommendation of VICH for the harmonization of the technical requirements for veterinary product registration.

The objectives of the VICH are along the same lines as those of the ICH. The VICH will:

- Establish and implement harmonized technical requirements for the registration of veterinary medicinal products in the VICH regions, which meet high quality, safety and efficacy standards and minimize the use of test animals and costs of product development.
- Provide a basis for wider international harmonization of registration requirements.
- Monitor and maintain existing VICH guidelines, taking particular note of the ICH work program and, where necessary, update these VICH guidelines.
- Ensure efficient processes for maintaining and monitoring consistent interpretation of data requirements following the implementation of VICH guidelines.
- Ensure efficient processes for maintaining and monitoring consistent interpretation of data requirements following the implementation of VICH guidelines.
- By means of a constructive dialogue between regulatory authorities and industry provide technical guidance enabling response to significant emerging global issues and science that impact on regulatory requirements within the VICH regions.

1.1. Background

The VICH guidelines on the technical requirements for marketing authorization applications for veterinary medicinal products are developed by expert working groups comprising experts from the different VICH members, from the observers and from VICH Outreach Forum countries on the topics identified by the VICH Steering Committee in a consultative process.

1.2. Scope

This guidance covers all types of initial veterinary applications for marketing authorization made in the GCC and National procedures including updates provided during the assessment phase (validation updates and responses to questions).

For notifications submitted regarding the deliberate release of a Genetically Modified Organism (GMO), it is advisable to confirm acceptance of an e-submission with the concerned national agency in GCC.

1.3. Functional Requirements

The specification is designed to support high-level functional requirements such as the following:

- Copying and pasting
- Viewing and printing of documents
- Annotation of documentation
- Facilitating the exporting of information to databases
- Searching within and across applications
- Navigating throughout the submission and its subsequent amendments/variations

1.4. Change Control

The specification for the submission is likely to change with time. Factors that could affect the content of the specification include, but are not limited to:

- Identification of new functional requirements
- Experience of use of the veterinary submission by all parties

1.5. Glossary and Definition

A brief glossary of terms (for the purpose of this document only) are indicated below:

APPLICANT	A pharmaceutical company or its agent that is submitting information in support of an <i>application</i> .
APPLICATION	A collection of documents compiled by a pharmaceutical company or its agent in compliance with guidelines in order to seek a marketing authorization or any amendments thereof.
CCITT	Consultative Committee for International Telephony and Telegraphy
CD/DVD	Compact Disc / Digital Versatile Disc or Digital Video Disc
DACS	Detailed and Critical Summaries
DPI	Dots per inch
ERA	Environmental Risk Assessment
GCC	Gulf Cooperation Council
GIF	Graphics Interchange Format
GMO	Genetically Modified Organism
GTOC	General Table of Contents
HARD MEDIA	Any type of physical media used for storage and transfer of electronic data (e.g. optical media like CDs or DVDs) in contrast to a purely electronic transfer e.g. via any web portal.
ICH	The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use
ISO	International Organization for Standardization
JPEG	Joint Photographic Experts Group
MAA	Marketing Authorization Application
MathML	Mathematical Markup Language
MB	Megabytes
MRL	Maximum Residue Limit
OCR	Optical Character Recognition
PDF	Portable Document Format
PNG	Portable Network Graphics

PROCEDURE	A registration procedure for the authorization of medicinal products
RGB	Red Green Blue
RTF	Rich Text Format
SmPC/SPC	Summary of Product Characteristics
SVG	Scalable Vector Graphics
TIFF	Tagged Image File Format
TOC	Table of Contents
URA	User Risk Assessment
VICH	International Cooperation on Harmonization of Technical Requirements for Registration of Veterinary Medicinal Products.

1.6. Related documents

[GCC VNeedS Validation Criteria](#)

2 GCC Veterinary Submission

This document describes the specific information that is common to all veterinary submissions in the Gulf Cooperation Countries.

2.1. General Considerations

2.1.1 Procedures for Sending Electronic Information

There are different ways of submitting electronic dossiers to competent authorities, including portals, or hard media (CD/DVD), if accepted by authorities. Normally, only one way should be used, to avoid sending multiple copies of the same submission to the authority.

Competent authorities will not accept any hardware (laptops, desktops, etc.) or software from applicants in connection with the submission of information in an electronic format. The electronic information should be directly readable and usable on the competent authorities' hardware (e.g. CD/DVD drive) and software. Authorities may require provision of a paper cover letter for electronic submissions.

An electronic version of a cover letter should always be included in the folder "add-info" of the veterinary submission (PDF preferably generated from text source without a requirement to scan a wet signature).

For authorities requiring an official signature for legal reasons, an originally signed cover letter or application form may accompany or follow the electronic submission.

2.1.2 Language

In order to facilitate the processing of the application and make the assessment more efficient, the scientific and technical documentation should be submitted in English. Both applicants and authorities should refrain from translations to languages other than English as this makes quality control and validation difficult and less reliable.

2.1.3 File Format

All documentation should be submitted using file formats that facilitate both reviews on screen and paper while retaining a similar format.

The portable document format (PDF) is a format which supports the described features. PDF provides an ISO-standardised format (ISO 32000-1:2008), including a long-term archiving format

also known as PDF/A (ISO-19005-1:2005, ISO-19005-2:2011 and ISO-19005-3:2012). PDF has been accepted as a standard for providing documents in electronic format by the International Council for Harmonisation (ICH) and is recommended as default file format by the veterinary equivalent (VICH).

Table 1: Acceptable file formats for GCC veterinary submissions

Document	File Format	Remark
<u>Administrative forms:</u> <ul style="list-style-type: none"> • Application form and its annexes • Variation application form incl. background for the variation • Renewal form and its annexes 	PDF PDF PDF	Documents should be generated from electronic source documents, any signature may be embedded as graphic file in the PDF text if desired, although this is not necessary as the hard paper copy contains the legally binding signature.
<u>Product Information:</u> <ul style="list-style-type: none"> • Labeling text • Packaging mock-ups • Reference to Specimens • Readability Testing • Information relating to Orphan Applications 	PDF PDF PDF PDF PDF	If a higher resolution is necessary for the mock-ups, use JPEG, GIF, PNG or SVG on a case-by-case basis. In that context, images can be transmitted in JPEG, GIF, PNG, TIFF, SVG, or MathML.
Other	PDF	PDF preferably generated from electronic source

Although the use of the file formats defined in Table 1 are mandatory, regulatory authorities and applicants could agree on the use of other formats for content provided outside of the VNeS in the “*add-info*” folder. For example, proprietary format MS Word for Product Information documents. These documents (SPC, label, and leaflet) should normally be provided in addition to the PDF versions.

2.1.4 Version

The PDF format used for a submission should be legible with Acrobat Reader, version 5.0 or higher.

All regional regulatory authorities are able to read and accept PDF files saved as PDF version 1.4 through 1.7, PDF/A-1, or PDF/A-2 compliant to ISO 32000-1:2008. Regulatory authorities should not need any additional software to read and navigate the PDF files. No PDF documents should be in version PDF 1.3 or earlier.

2.1.5 File Size

The file size of a single file should be limited to 100 MB.

2.1.6 Methods for Creating PDF Documents and Images

Adobe Portable Document Format (PDF) is a published format created by Adobe Systems Incorporated (<http://www.adobe.com>). It is not necessary to use a product from Adobe or from any specific company to produce PDF documents.

PDF is accepted as a standard for documents defined in this specification. The following recommendations support the creation of PDF files that agencies can review effectively. To ensure that PDF files can be accessed efficiently, Optimize PDF files for fast web view.

The method used for creating PDF documents should produce the best replication of a paper document. To ensure that the paper and PDF version of the document are the same, the document should be printed from the PDF version. Documents that are available only in paper should be scanned at resolutions that will ensure the pages are legible both on the computer screen and when printed. At the same time, the file size should be limited. It is recommended that scanning be undertaken at a resolution of 300 dots per inch (dpi) to balance legibility and file size. The use of grayscale or color is discouraged because of file size. After scanning, resampling to a lower resolution should be avoided.

When creating PDF files containing images, the images should not be downsampled. Downsampling does not preserve all of the pixels in the original. For PDF images, one of the following lossless compression techniques should be used:

- For lossless compression of color and grayscale images, use Zip/Flate (one technique with two names). This is specified in Internet RFC 1950 and RFC 1951 (<http://www.ietf.org/rfc/rfc1950.txt>).
- For lossless compression of black and white images, use the CCITT Group 4 Fax compression technique. It is specified as CCITT recommendations T.6 (1988) - *Facsimile coding schemes and coding control functions for Group 4 facsimile apparatus*.

Paper documents containing hand-written notes should be scanned at a resolution of at least 300 dpi.

Hand-written notes should be done in black ink for clarity. Higher resolution is specifically requested when scanning documents containing non-Western characters (e.g. Kanji); 600 dpi is recommended.

For photographs, the image should be obtained with a resolution of 600 dpi. If black and white photos are submitted, 8-bit grayscale images should be considered. If color photos are submitted, 24-bit RGB images should be considered. A captured image should not be subjected to non-uniform scaling (i.e., sizing). Gels and karyotypes should be scanned directly, rather than from photographs. Scanning should be at 600 dpi and 8-bit grayscale depth. Plotter output graphics should be scanned or captured digitally at 300 dpi.

High-pressure liquid chromatography or similar images should be scanned at 300 dpi.

Applicants should validate the quality of the renditions.

2.1.6.1 Electronic source documents

To allow functionality such as text searching, copying and pasting into editable formats, PDF documents should be created (rendered) directly from their electronic source documents, except where the applicant has no access to the electronic source document. Such exempted documents are for example:

- copies of documents provided by regulatory authorities such as manufacturer's licences, certificates of suitability, manufacturing authorizations,
- copies of documents from other external sources like certificates of analysis,
- any literature references sourced from journals, periodicals and books.

If documents are sourced from a scanned original the only way to create searchable text is using an Optical Character Recognition (OCR) routine. The use of OCR should be considered when preparing key documents of the submission, in particular the main body of text of the detailed and critical summaries, or written summaries of the applicant. Applicants do not have to quality assure the underlying OCR; however, good quality scanned copies should be used for OCR wherever possible, as more accurate text will allow for increased utility by reviewers.

2.1.6.2 Bookmarks and hypertext links

Navigation through an electronic submission is greatly enhanced by the intelligent use of bookmarks and hypertext links. Documents without TOCs should have bookmarks included where it aids in the navigation around the document content. For example, a 5 page document summarizing findings could require bookmarks to aid navigation. However, a 300 page file containing a single data listing might not require bookmarks as there is no further internal structure. “Please consult national guidance documents for further details.”

In general terms, bookmarks and hyperlinks should be used to aid navigation. The overuse of hyperlinks may confuse rather than help assessors and may cause problems later in life cycle management. For documents with a table of contents, bookmarks for each item listed in the table of contents should be provided including all tables, figures, publications, other references, and appendices. Bookmarks should follow hierarchical level and order of table of contents. These bookmarks are essential for the efficient navigation through documents. The bookmark hierarchy should be identical to the table of contents with no additional bookmark levels beyond those present in the table of contents.

2.1.6.3 Fonts

PDF viewing software automatically substitutes a font to display text if the font used to create the text is unavailable on the reviewer’s computer. Font substitution can affect a document’s appearance and structure, and, in some cases, the information conveyed by a document. GCC Agencies cannot guarantee the availability of any fonts except Times New Roman, Arial, and Courier and fonts supported in the Acrobat product set itself. Therefore, all additional fonts used in the PDF files should be embedded to ensure that those fonts would always be available to the

reviewer. When embedding fonts, all characters for the font should be embedded, not just a subset of the fonts being used in the document.

Embedding fonts requires additional computer storage space. Three techniques to help limit the storage space taken by embedding fonts include:

- Limiting the number of fonts used in each document
- Using only True Type or Adobe Type 1 fonts
- Avoiding customized fonts

2.1.6.4 Page numbering

Only the internal page numbers of the document are expected (1-n). No additional page/volume numbers running across documents are expected. It is easier to navigate through an electronic document if the page numbers for the document and the PDF file are the same. To accomplish this, the first page of the document should be numbered page 1, and all subsequent pages (including appendices and attachments) should be numbered consecutively with Arabic numerals. Roman numerals should not be used to number pages (e.g., title pages, tables of contents) and pages should not be left unnumbered (e.g., title page). Numbering in this manner keeps the Acrobat numbering in synchrony with the internal document page numbers.

The only exception should be where a document is split because of its size (Refer to Section 2.1.5 for information regarding File Size); the second or subsequent file should be numbered consecutively to that of the first or preceding file.

2.1.6.5 Open Dialog Box

The open dialog box sets the document view when the file is opened. The initial view of the PDF files should be set as *Bookmarks* and *Page*. If there are no bookmarks, the initial view as *Page* only should be set. The *Magnification* and *Page Layout* should be set as default.

2.1.6.6 Use of Acrobat Plug-Ins

It is appropriate to use plug-ins to assist in the creation of a submission. However, the review of the submission should not call for the use of any plug-ins in addition to those provided with Adobe Acrobat because agencies will not necessarily have access to the additional plug-in functionality.

2.1.6.7 Hard Media (CD/DVD)

Where electronic files are provided on finalized optical media such as CD or DVD, each hard medium on which the e-submission is presented should include at a minimum the following label information:

- Name of the product,
- Type of application,
- Procedure number (if known in advance by the applicant),
- Name of company,
- Target species (if necessary to avoid confusion of products),
- Version (including date),
- Indication as to whether multiple media components are used (and if so, these should be numbered, e.g. 1/2, 2/2),

The information provided, specifically procedure number and version (including date), should allow at any procedural step a unique identification of the submission, that can be referred to by involved competent authorities.

This information should preferably be printed directly onto the hard media as hand-written or self-adhesive labels may compromise the disc or peel-off in time.

Zipped files should not be used when sending CDs or DVDs.

Applicants should provide the electronic submission on the smallest number of media components possible, e.g. if the Veterinary submission spans several CDs, the provision of a DVD is recommended.

If more than one media component is needed, the dossier should be split at a logical point within the granularity such that the integrity of the granularity is maintained. Where possible, individual dossier parts (Part 1, Part 2 etc.) should be kept together and not be split over multiple media components.

2.1.7 Correspondence

In addition to the Veterinary application, information may need to be exchanged to assist the processing or handling of the application. Not all that correspondence should be included in the electronic submission. This is because the submission exchange is currently one way only, from applicant to Agency, and not all correspondence is directly relevant to the application dossier.

2.2. Technical Information

2.2.1. Use of Electronic Signatures

The use of advanced electronic signatures (digital signatures) will be crucial in achieving pure electronic communication between the pharmaceutical industry and regulatory agencies, particularly for authentication of electronic submissions and documents contained therein. Currently however, the use of digital signatures for electronic submissions within GCC is not fully supported and digital signatures should therefore not be used (Please refer to each national competent authority for detailed guidance on this matter). The applicant has the obligation to ensure a proper certification of the submitted documents. Valid signatures should be available from the applicant and be presented at the request of the authorities. National Authorities should, wherever necessary, accept a signed paper cover letter confirming the correctness of the submitted file(s).

2.2.2. Security Issues

The physical security of the submission during transportation is the responsibility of the applicant. Once received by national authority, security and submission integrity is the sole responsibility of the national competent authority. No security settings or password protection for PDF files should be included. The exception to this rule includes regulatory forms with pre-existing security and literature references that need to be copyright protected. At a minimum, the receiver should be able to easily open and view the content.

2.2.3. Virus Protection

The applicant is responsible for checking the submission for viruses. Checking should be performed with an up-to-date virus checker and be confirmed in the cover letter.

2.2.4. Password Protection

Submission or file level security is not permitted. If one-time security settings or password protection of electronic submissions are used this could constitute grounds for the rejection of the submission.

2.3. General Architecture of Veterinary submission

2.3.1. Directory / File Structure

The GCC Specification for Veterinary submission provides the directory and file structure (see Appendix 1).




2.3.2. Granularity

The folder structure (granularity) for an electronic submission is described in **Table 2** for Pharmaceutical products, **Table 3** for Immunological products and **Table 4** for MRL products should be used where applicable to prepare any electronic submission,

This hierarchical structure of folders within a root folder gives, depending on the type of submission, up to three levels of granularity.


The complete folder structure is shown in the table below:

Table 2: Folder structure for a pharmaceutical product

root-<mydrug>		<i>Submission-specific root folder</i>
 gtoc.pdf		<i>(General Table of Contents)</i>
<input type="checkbox"/> add-info		<i>(Additional information)</i>
	cc	<i>(Country code as per Appendix 3)</i>
<input type="checkbox"/> p1		<i>Part 1 – Summary of the dossier</i>
	 p1-toc.pdf	<i>Table of contents Part 1</i>
	<input type="checkbox"/> 1a-admin-info	<i>Administrative information</i>
	<input type="checkbox"/> 1b-spc-pl	<i>SPC, Labelling and Package Leaflet</i>
	<input type="checkbox"/> 1c-dacs	<i>Critical Summaries</i>
	<input type="checkbox"/> 1c1-qual	<i>Quality documentation</i>
	<input type="checkbox"/> 1c2-saf-resid	<i>Safety and residues documentation</i>
	<input type="checkbox"/> 1c3-effic	<i>Efficacy documentation</i>
	<input type="checkbox"/> 1-responses	<i>Responses to questions</i>
<input type="checkbox"/> p2		<i>Part 2 – Quality documentation</i>
	 p2-toc.pdf	<i>Table of contents Part 2</i>
	<input type="checkbox"/> 2a-qual-quant-partic	<i>Qualitative and quantitative particulars of the constituents</i>
	<input type="checkbox"/> 2b-manuf	<i>Description of the manufacturing method</i>
	<input type="checkbox"/> 2c-contr-start-mat	<i>Control of starting materials</i>
	<input type="checkbox"/> 2c1-act-sub	<i>Active substances</i>

	<input type="checkbox"/> 2c2-excip	<i>Excipients</i>
	<input type="checkbox"/> 2c3-cont-clos-sys	<i>container-closure systems</i>
	<input type="checkbox"/> 2c4-bio-origin	<i>Substances of biological origin</i>
	<input type="checkbox"/> 2d-contr-intermed	<i>Control test carried out at intermediate stages of the production process</i>
	<input type="checkbox"/> 2e-tests-fin-prod	<i>Tests on the finished product</i>
	<input type="checkbox"/> 2f-stab	<i>Stability tests</i>
	<input type="checkbox"/> 2f1-act-sub	<i>Active substances</i>
	<input type="checkbox"/> 2f2-fin-prod	<i>Finished product</i>
	<input type="checkbox"/> 2g-other-info	<i>Other information</i>
<input type="checkbox"/> p3		<i>Part 3 – Safety and residues tests</i>
	 p3-toc.pdf	<i>Table of contents Part 3</i>
	<input type="checkbox"/> 3a-saf	<i>Safety tests</i>
	<input type="checkbox"/> 3a1-ident	<i>Precise identification of the product and of its active substance(s)</i>
	<input type="checkbox"/> 3a2-pharmacol	<i>Pharmacology</i>
	<input type="checkbox"/> 3a3-tox	<i>Toxicology</i>
	<input type="checkbox"/> 3a4-other	<i>Other requirements</i>
	<input type="checkbox"/> 3a5-ura	<i>User safety</i>
	<input type="checkbox"/> 3a6-era	<i>Environmental risk assessment</i>
	<input type="checkbox"/> 3b-resid	<i>Residue tests</i>
	<input type="checkbox"/> 3b1-ident	<i>Precise identification of the product concerned by the application</i>
	<input type="checkbox"/> 3b2-metab-resid	<i>Metabolism and residue kinetics</i>
	<input type="checkbox"/> 3b3-resid-analyt-met	<i>Residue analytical method</i>
<input type="checkbox"/> p4		<i>Part 4- Pre-clinical and clinical trials</i>
	 p4-toc.pdf	<i>Table of contents Part 4</i>
	<input type="checkbox"/> 4a-preclin	<i>Pre-clinical trials</i>
	<input type="checkbox"/> 4a1-pharmacol	<i>Pharmacology</i>
	<input type="checkbox"/> 4a2-resist	<i>Development of resistance</i>
	<input type="checkbox"/> 4a3-tas	<i>Tolerance in the target animal species</i>
	<input type="checkbox"/> 4b-clin	<i>Clinical trials</i>

Table 3: Folder structure for an immunology product

root-<mydrug>		<i>Submission-specific root folder</i>
 gtoc.pdf		<i>(General Table of Contents)</i>
<input type="checkbox"/> add-info		<i>(Additional information)</i>
	cc	<i>(Country code as per Appendix 3)</i>
<input type="checkbox"/> p1		<i>Part 1 – Summary of the dossier</i>
	 p1-toc.pdf	<i>Table of Contents Part 1</i>
	<input type="checkbox"/> 1a-admin-info	<i>Administrative information</i>
	<input type="checkbox"/> 1b-spc-pl	<i>SPC, Labelling and Package Leaflet</i>
	<input type="checkbox"/> 1c-dacs	<i>Critical Summaries</i>
	<input type="checkbox"/> 1c1-qual	<i>Quality documentation</i>
	<input type="checkbox"/> 1c2-saf	<i>Safety documentation</i>
	<input type="checkbox"/> 1c3-effic	<i>Efficacy documentation</i>
	<input type="checkbox"/> 1-responses	<i>Responses to questions</i>
<input type="checkbox"/> p2		<i>Part 2 – Quality documentation</i>
	 p2-toc.pdf	<i>Table of Contents Part 2</i>
	<input type="checkbox"/> 2a-qual-quant-partic	<i>Qualitative and quantitative particulars of the constituents</i>
	<input type="checkbox"/> 2b-manuf	<i>Description of the manufacturing method</i>
	<input type="checkbox"/> 2c-prod-contr-start-mat	<i>Production and Control of starting materials</i>
	<input type="checkbox"/> 2c1-start-mat-in-ph	<i>Starting materials listed in pharmacopoeias</i>
	<input type="checkbox"/> 2c2-start-mat-not-in-ph	<i>Starting materials not listed in pharmacopoeias</i>
	<input type="checkbox"/> 2d-contr-manuf	<i>Tests during the manufacturing process</i>
	<input type="checkbox"/> 2e-tests-fin-prod	<i>Tests on the finished product</i>
	<input type="checkbox"/> 2f-batch-consist	<i>Batch-to-batch consistency</i>
	<input type="checkbox"/> 2g-stab	<i>Stability tests</i>
	<input type="checkbox"/> 2h-other-info	<i>Other information</i>
<input type="checkbox"/> p3		<i>Part 3 – Safety tests</i>
	 p3-toc.pdf	<i>Table of Contents Part 3</i>
	<input type="checkbox"/> 3a-gen-requ	<i>General requirements</i>
	<input type="checkbox"/> 3b-lab-tests	<i>Laboratory tests</i>
	<input type="checkbox"/> 3c-field-stud	<i>Field studies</i>
	<input type="checkbox"/> 3d-era	<i>Environmental risk assessment</i>
	<input type="checkbox"/> 3e-gmo	<i>Assessment required for VMPs containing or consisting of GMOs</i>
	 p3e-toc.pdf	<i>Table of contents Part 3E</i>
	<input type="checkbox"/> 3e-annexes	<i>Annexes</i>





























<input type="checkbox"/> p4		<i>Part 4- Efficacy tests</i>
	 p4-toc.pdf	<i>Table of Contents Part 4</i>
	<input type="checkbox"/> 4a-gen-requ	<i>General requirements</i>
	<input type="checkbox"/> 4b-lab-trials	<i>Laboratory trials</i>
	<input type="checkbox"/> 4c-field-trials	<i>Field trials</i>

Table 4: Folder structure for an MRL application

 root-<mydrugsubstance>		<i>Submission-specific root folder</i>
	 gtoc.pdf	<i>(General Table of Contents)</i>
	 add-info	<i>(Additional information)</i>
	 p1	<i>(Part 1 – Administrative data and summary of the dossier)</i>
	 p1-toc.pdf	<i>(Table of Contents Part 1)</i>
	 1-admin-info-summary	<i>(Administrative information and summary of evaluation proposed by applicant/requestor)</i>
	 1-responses	<i>(Response to list of questions)</i>
	 p2	<i>(Part 2 – Safety file)</i>
	 p2-toc.pdf	<i>(Table of Contents Part 2)</i>
	 2a-dacs-saf	<i>(Detailed and Critical Summary (DACS) for safety)</i>
	 2b-ident	<i>(Precise identification of the substance concerned by the application)</i>
	 2c-pharmacol	<i>(Pharmacology)</i>
	 2d-tox	<i>(Toxicology)</i>
	 2e-other	<i>(Other effects (immunotoxicity, microbiological properties of residues, observations in humans)</i>
	 2f-adi	<i>(Acceptable Daily Intake or alternative limit)</i>
	 p3	<i>(Part 3 – Residue file)</i>
	 p3-toc.pdf	<i>(Table of Contents Part 3)</i>
	 3a-dacs-resid	<i>(Detailed and Critical Summary (DACS) for residues)</i>
	 3b-metab-resid	<i>(Metabolism and residue kinetics)</i>
	 3c-monit-expos	<i>(Monitoring and exposure data, if relevant)</i>
	 3d-resid-analyt-met	<i>(Residue analytical method)</i>

	 p4	<i>(Part 4 – Risk management considerations)</i>
	 p4-toc.pdf	<i>(Table of Contents Part 4)</i>
	 4a-other-factors  4b-other-rm  4c-mrls  4d-extrapolation	<i>(Other legitimate factors)</i> <i>(Other relevant risk management considerations)</i> <i>(Elaboration of MRLs)</i> <i>(Considerations on possible extrapolation of MRLs)</i>

2.3.3. File naming convention

The maximum length of the name of a single folder or file is 64 characters including the extension. Folder or file names should be written in lower case only. All files should have one and only one file extension. The file extension should be used to indicate the format of the file.

For Part 1 administrative information file naming, see Appendix 2.

Root folder

The name of the top level folder ("root folder") of each Veterinary folder structure should allow appropriate identification of the submission, especially in cases where more than one Veterinary structure is located on a single hard medium.

Each root folder name must start with the letters "**root**", followed by a specific identification of the submission which can be defined by the applicant.

A hyphen ("-") character) should be used as separator.

It is recommended to use as specific identification

- the product (invented) name and/or
- the procedure number (if known), especially if more than one procedure is included on the same CD, and /or
- the submission date or day of procedure, to allow tracking of updates during the procedure

Example

root-mydrug

root-wonderpill-H000001-1nov2018

Folder "add-info" (additional information)

The folder structure includes a folder called "*add-info*" located in the root folder.

Where the applicant still has to fulfil any specific national requirements, related country-specific documents should be provided in this folder. If so, subfolders should be included named with the country code of the country (*Appendix 2*).

Any files submitted voluntarily for information only, like user instructions for the reviewer, should also be placed in the folder "*add-info*". Files and subfolders in the folder "*add-info*" are not subject to technical validation. In any case applicants should ensure that previous submissions include sufficient features for navigation like a hyperlinked table of contents.

Note that except in the case of the above mentioned documents, administrative information and scientific documentation should not be located in the "*add-info*" folder, but in the veterinary folders corresponding to the relevant veterinary dossier chapters.

2.3.4. Adaptation of Folder Structure

Where the structure defined in **Table 2** and **Table 3** applies, including additional folders within the structure of the e-submission is not permitted, with the exception of the folder "*add-info*" where subfolders could be constructed.

If applicants wish to further separate information within a given folder, this should only be done by clearer guidance in the Table of Contents (e.g. adding additional headings), or by using bookmarks within the appropriate documents (e.g. in order to clearer differentiate between target species, pharmaceutical forms, or lower numbered sections e.g. in the quality or safety dossier).

If there are empty folders in the submission because no data is provided these should be deleted as the folder structure should reflect only what actually is submitted. Corresponding positions in the relevant table of contents (TOC) should also be deleted.

A justification of absence of the folder should be mentioned in the cover letter.

When only little information is presented for a number of folders at the same level of granularity, it is acceptable to include all the information in a single PDF at the higher level of the granularity. This should be indicated in the TOC.

2.3.5. Tables of Contents: Electronic Veterinary Dossier

The dossier structure in veterinary submissions might vary considerably between applicants and applications, and any veterinary dossier should therefore include clear navigation tools to facilitate the assessment. A clear General Table of Contents GTOC is an essential tool for navigation within an electronic dossier, and examples for TOC entries are provided below.

However, the examples are for guidance purposes only; thus, alternative TOCs and file granularity that can ensure a similar and efficient level of navigation are also acceptable.

In case a file granularity is chosen that combines several documents within a single PDF (e.g. for a complete dossier subchapter), further navigation features (e.g. via bookmarks) within the PDF file should be used that follow the same rationale as described for the TOC examples in this guidance.

The TOC examples below provide solutions for:

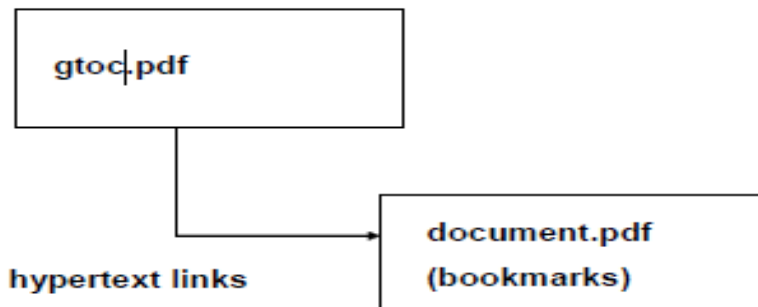
1. Simple automated TOC builders, using veterinary electronic submission file and folder names only (grey shaded examples), or
2. TOCs that include additional information either through manual creation / editing or by using more complex software solutions to automatically generate TOCs.

Simple TOC builders must only be used where descriptive file names are used throughout the submission, thereby ensuring easy identification of content and efficient navigation.

The general principles below apply similarly to both pharmaceutical and immunological dossiers.

The diagrams below illustrate the recommended use of features for navigation.

Navigation to GTOC only



Navigation via GTOC and part-specific TOCs:

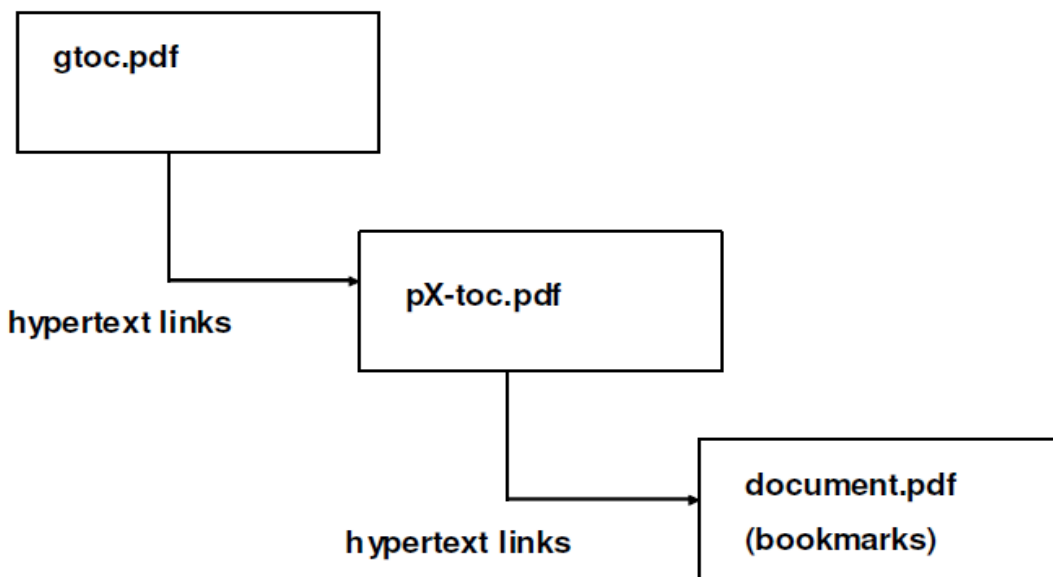


Fig 1: Diagram for recommended use of features for navigation.

The GTOC should be named "*gtoc.pdf*". The files containing the part-specific TOCs should be named "*p1-toc.pdf*", "*p2-toc.pdf*", "*p3-toc.pdf*" and "*p4-toc.pdf*".

In case of immunological products, the contents of Part 3E 'Assessment for products containing or consisting of GMOs' may be covered by a separate TOC for this subpart, named "*p3e-toc.pdf*".

The GTOC should be a complete index to the whole dossier either referring directly to content documents or via the part-specific TOCs, while the TOC for each part of the dossier should be a complete index for that part of the dossier. Files being present in the folder "add-info" should not be included in the GTOC or TOCs.

Hypertext links in GTOC or TOCs are essential for efficient navigation through any larger submission. Therefore, all documents in the submission should be referenced in a GTOC or TOC using a hyperlink. The general TOC should always be hyperlinked to any part-specific TOCs. Hyperlinks to the documents in each dossier part should be present either in the GTOC or the part-specific TOCs. Hyperlinks should only be made to documents within the same veterinary electronic submission and not to external sources.

Where applicable, the GTOC structure should follow the structure of an application dossier. It should be a complete index to the whole dossier.

Example of GTOC level

Part 1	Summary of the Dossier
Part 2	Quality/Pharmaceutical Documentation

The blue underlined text illustrates where hyperlinks to individual documents should appear.

p1-toc.pdf
p2-toc.pdf

Example of TOC level

2f	Stability Tests
2f1	Active substance(s)

2f-act-stab	2f1-stability-active-subst.pdf
-------------	--

The granularity of the GTOC should usually be more detailed than the veterinary electronic submission folder structure to ensure that documents are easy to find.

A descriptive file name for each document should be used to allow easy identification of its content where more than one document is listed under the TOC lowest sub-heading.

Example:

1a-admin-info	Administrative information
----------------------	-----------------------------------

However where it is not possible to use descriptive file names, e.g. taking into account path length restrictions, the applicant has to add further information to the TOC such as descriptive titles, document reference numbers, authors, etc....

Part 1	Administrative information
Annex-5-5.pdf	Curriculum Vitae of the Qualified Person for Pharmacovigilance

2.3.6. Folder Names

Folder names should be in English and where the Veterinary submission structure defined in this guidance is applicable follow exactly the conventions given in:

- **Table 2** for pharmaceutical products,
- **Table 3** for immunological products and ,
- **Table 4** for MRL applications.

2.3.7. Folder Structure for Initial MAA

The folder structure for an electronic submission of an initial application for marketing authorization is shown in section 2.3.2.

2.3.8. Use of Summary Reports in MRL Dossier

Summary reports (obligatory Detailed and Critical Summaries or DACS) should be saved into p1, and the textual summaries are optional (see **Table 4**).

2.3.9. Submission Structure for Updates during Assessment Phase

The initial submission and subsequent amendments during the assessment phase should use different root folder names to allow efficient tracking of submissions, e.g. by including the submission date or day of procedure.

Though applicants are strongly encouraged to use in subsequent submissions consistent file naming conventions there is no requirement to exactly preserve file names during life cycle changes; in fact, logical differences in file names can be helpful during review when both files are open simultaneously for comparative or other purposes.

2.3.10. Validation Updates

As a consequence of the technical or regulatory validation process there may be the need for updates of the Veterinary submission.

Normally, a corrected version of the full application has to be re-submitted if the submission is technically invalid.

If there is a need to update the dossier due to the content validation, the applicant should liaise with the relevant authority in GCC whether these documents could be submitted as single documents, or sending an updated veterinary submission is required. Single files should be properly named so it is easily understood what is submitted.

2.3.11. Responses to Questions

In response to questions on the initial submission, the applicant submits document(s) containing the actual text of the responses as well as amendments to the initial dossier.

If the response submission contains more than a single file, the main response document(s) should be located in the folder "*1-responses*" in Part 1. Any additional documents submitted with the responses should be assigned to the relevant folders "*add-info*", as specified in section 2.3.2. The response submission is a stand-alone submission; it is thus not required to send an update of the initial veterinary submission consolidated with the responses (i.e. the new submission should include a cover letter, the responses and the updated document if needed in relevant sections).

Where new or updated documents are required, easy navigation to the new or updated documents should be ensured.

Appendix 1: Example Screenshot

This appendix is included only to demonstrate how the directory structure may appear for Veterinary submission for Gulf Cooperation Council (GCC).

Part 1: Folder structure for 1a-admin-info (Administrative and Product Information, Clinical Summaries, Responses to questions)

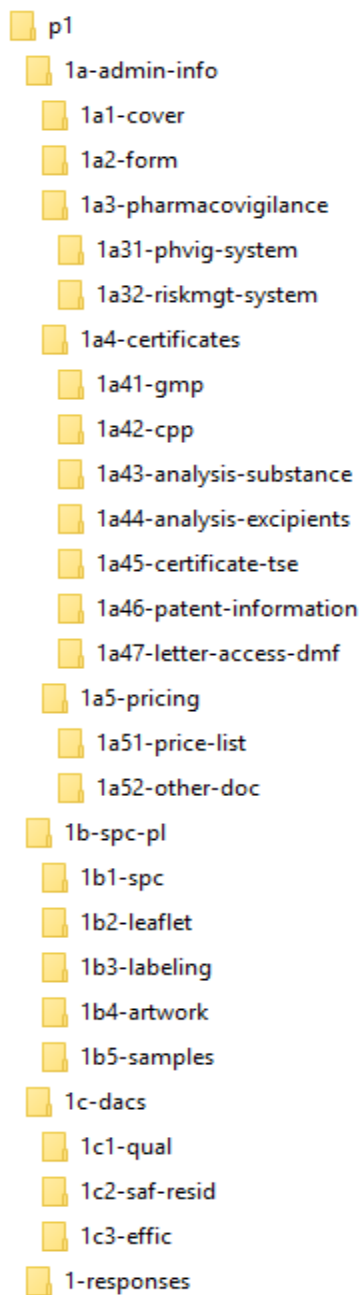


Fig 2: Folder structure for 1a-admin-info

Pharmaceutical Folder

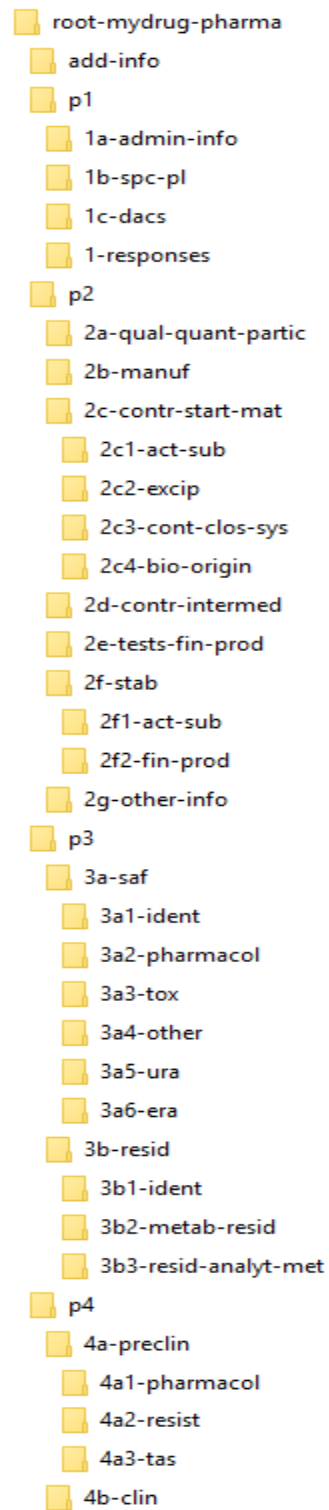


Fig 3: Folder structure for pharmaceutical application

Immunology Folder

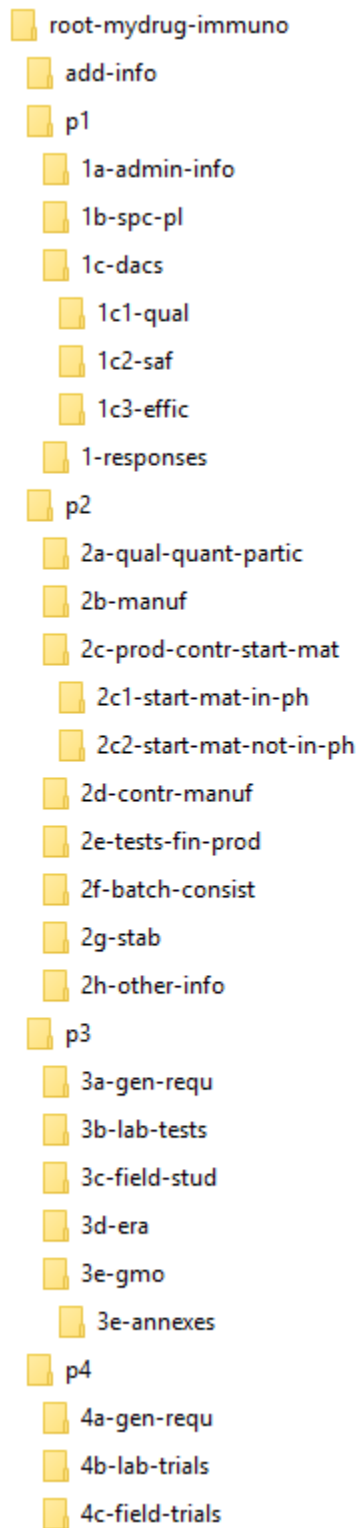


Fig 4: Folder structure for immunology application

MRL Folder

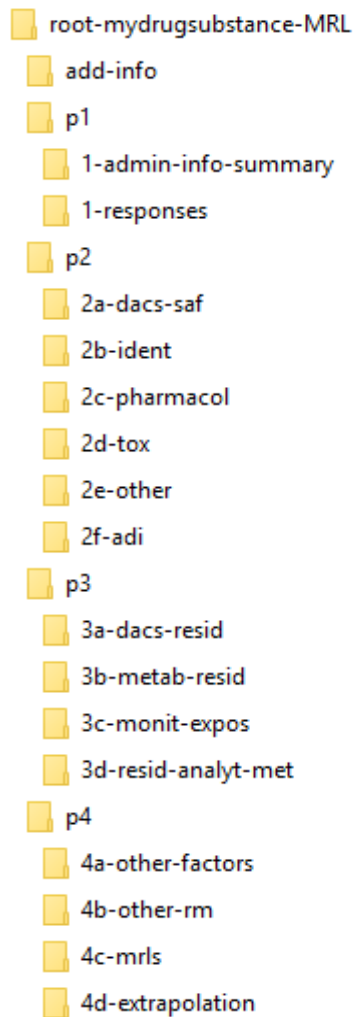


Fig 5: Folder structure for MRL application

Note: Please contact the agency before to submit a MRL application

Add Info folder

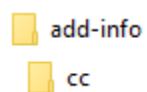


Fig 6: Folder structure for add-info

Appendix 2: Directory/File Structure for Part 1

The directory / file structure is defined in this appendix as a table containing the following information:

The names of the actual files and directories used should be presented in lower case in accordance with the specification. The codes “VAR” and “EXT” represent a variable component of the file name and a representation of a file extension respectively. The use of upper case for those codes is for illustrative purposes only to show differentiation between the variable parts and the fixed part of the name.

Please note that “CC” represents the country code and “LL” the language code. It is added to a directory if a file is specific to a country.

Section	Description	Folder	File name
add-info	Additional data	<i>add-info/CC</i>	
p1	Part 1		
1a	Administrative Information		
1a1	Cover letter	<i>p1\1a-admin-info\1a1-cover/CC</i>	<i>CC-cover-Var.pdf</i>
1a2	Application Form	<i>p1\1a-admin-info\1a2-form\CC</i>	<i>CC-form-Var.pdf</i>
1a3	Pharmacovigilance		
1a31	Pharmacovigilance System	<i>p1\1a-admin-info\1a3-pharmacovigilance\1a31-phvig-system</i>	<i>phvigsystem-Var.pdf</i>
1a32	Risk Management Plan	<i>p1\1a-admin-info\1a3-pharmacovigilance\1a32-riskmgt-system</i>	<i>riskmgtsystem-Var.pdf</i>
1a4	Certificates and Documents		
1a41	GMP Certificate	<i>p1\1a-admin-info\1a4-certificates\1a41-gmp</i>	<i>gmp-Var.pdf</i>
1a42	CPP	<i>p1\1a-admin-info\1a4-certificates\1a42-cpp</i>	<i>cpp-Var.pdf</i>
1a43	Certificate of analysis – Drug Substance & Finished Product	<i>p1\1a-admin-info\1a4-certificates\1a43-analysis-substance</i>	<i>drugsubstance-Var.pdf</i>
1a44	Certificate of analysis – Excipients	<i>p1\1a-admin-info\1a4-certificates\1a44-analysis-</i>	<i>excipients-Var.pdf</i>

Section	Description	Folder	File name
		<i>excipients</i>	
1a45	Certificate of suitability for TSE	<i>p1\1a-admin-info\1a4-certificates\1a45-certificate-tse</i>	<i>tse-Var.pdf</i>
1a46	Patent Information	<i>p1\1a-admin-info\1a4-certificates\1a46-patent-information</i>	<i>patent-Var.pdf</i>
1a47	Letter of access or acknowledgment to DMF	<i>p1\1a-admin-info\1a4-certificates\1a47-letter-access-dmf</i>	<i>accessdmf-Var.pdf</i>
1a5	Pricing		
1a51	Price list	<i>p1\1a-admin-info\1a5-pricing\1a51-price-list\CC</i>	<i>CC-price-Var.pdf</i>
1a52	Other documents related	<i>p1\1a-admin-info\1a5-pricing\1a52-other-doc\CC</i>	<i>CC-others-Var.pdf</i>
1b	SPC and Product Literature (Product Information)		
1b1	Summary of Product Characteristics (SPC)	<i>p1\1b-spc-pl\1b1-spc\CC</i>	<i>CC-spc-Var.pdf</i>
1b2	Package leaflet (PL)	<i>p1\1b-spc-pl\1b2-leaflet\CC\LL</i>	<i>CC-leaflet-Var.pdf</i>
1b3	Labeling	<i>p1\1b-spc-pl\1b3-labeling\CC\LL</i>	<i>CC-label-Var.pdf</i>
1b4	Artwork (Mock-ups)	<i>p1\1b-spc-pl\1b4-artwork\CC</i>	<i>CC-artwork-Var.pdf</i>
1b5	Samples	<i>p1\1b-spc-pl\1b5-samples\CC</i>	<i>CC-samples-Var.pdf</i>
1c	Critical Summaries		
1c1	Quality	<i>p1\1c-dacs\1c1-qual</i>	<i>quality-Var.pdf</i>
1c2	Safety (pharmaceutical)	<i>p1\1c-dacs\1c2-saf-resid</i>	<i>safety-residue-Var.pdf</i>
	Safety (immunological)	<i>p1\1c-dacs\1c2-saf</i>	<i>safety-Var.pdf</i>
1c3	Efficacy	<i>p1\1c-dacs\1c3-effic</i>	<i>efficacy-Var.pdf</i>
1-responses	Response to Questions	<i>p1\1-responses\CC</i>	<i>CC-responses-Var.pdf</i>

Appendix 3: List of codes

GCC Agencies

Country	Code agency	Description
Bahrain	BH-MOH	Ministry of Health
Kuwait	KW-MOH	Ministry of Health
Oman	OM-MOH	Ministry of Health
Qatar	QA-NHA	National Health Authority
Republic of Yemen	YE-MOPHP	Ministry of Public Health and Population
Saudi Arabia	SA-SFDA	Saudi Food and Drug Authority
UAE	AE-MOH	Ministry of Health

Destination

In most cases, the destination code is an ISO-3166-1 code usually called “country code”.

Country code	Destination
AE	State of United Arab Emirates
BH	Kingdom of Bahrain
KW	State of Kuwait
OM	Sultanate of Oman
QA	State of Qatar
SA	Saudi Arabia
YE	Republic of Yemen

Note: Use “common” as country code when the submission applies to all countries.

Language

Language	Description
ar	Arabic (when required)
en	English