Standard for GEHC Life Sciences Change Control process for Designated Biacore™ products
1. Introduction

A process for change control is required for suppliers to the biopharmaceutical industry. As a supplier of products often used in a GMP environment, GEHC Life Sciences has acknowledged that change control is a critical process in the quality system and necessary to fulfill the obligations to supply products with a consistent quality to our customers.

2. Purpose

The purpose of this document is to provide an overview of the change control process for designated Biacore™ products within GEHC Life Sciences. Detailed procedures and instructions that are in compliance with this document are used at the local GEHC sites and can be reviewed during audits. This document may be used externally to introduce GEHC Life Sciences Quality Management System to customers or other external organizations or individuals.

3. Scope

This standard applies to Biacore products (consumables, instruments and software) manufactured by GEHC Life Sciences that are available for subscription to change control notifications (designated products) and thus are listed on the web page: www.gelifesciences.com/rsf.

4. Definitions

**Change control:** Management of all planned changes associated with the manufacturing of marketed products.

**Product quality:** The product characteristics that are listed in the product specification.

**Critical subcontractor:** Contract manufacturer of critical raw material or product.

**Design changes:** Any modification to a product that may impact design form, fit or function.
5. Steering principles

Each manufacturing unit has a change control board with representatives from quality assurance, R&D, manufacturing and other relevant functions. The representatives must be on an organizational level that gives authority to take decisions.

The board or its delegates:
- Assesses all aspects of proposed changes
- Assesses output from risk management
- Decides on the extent of verification/validation
- Decides if a customer notification is required, see 7. Customer notification.
- Reviews and approves design and manufacturing changes

6. Risk management of change

Changes are evaluated regarding product quality from a risk perspective. When a potential hazard is identified, measures are taken to reduce the risk to an acceptable level. A risk assessment is performed and consists of identification of potential hazards and the analysis and evaluation of risks associated with those hazards. Preventive measures are taken to minimize the potential impact on product quality. Residual risk evaluation and overall risk acceptance are performed.

Verification/validation can be performed as a part of the risk management to assure that the process is consistent.

7. Customer notification

For changes listed in sections 7.1 through 7.4, customers are always notified.

For changes not listed in sections 7.1 through 7.4, the result of the risk management process will determine whether a notification is sent out. The decisions are taken by the change control boards. Time frames are based on the type of change. When the risk assessment and risk control process result is no-risk or low-risk impact on the quality of the product, customers need not be notified of the change.

Changes subject to customer notification

Notification is given for products available for subscription to change control notifications, listed on the web page www.gelifesciences.com/rsf, according to the description below.

The time frames in sections 7.1 through 7.4 are estimates, which GEHC Life Sciences aims to fulfil. However, there may be situations due to external or internal factors where GEHC Life Sciences may have to provide shorter notices and reserves the right to inform with shorter notice than described below in situations when non-standard events occur.

7.1 Notification of changes to this document

Notification of a new edition of this change control standard will be made minimum 3 months prior to implementation.

7.2 For Biacore consumables

Changes for which notification is made prior to implementation:
- Change in label and/or packaging material
- Change of company name
- Change concerning shelf life
- Change concerning storage condition
- Change of critical information in Instructions For Use (IFU)

Changes for which notification is made a minimum of 3 months prior to implementation:
- Change of critical subcontractor
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- New edition of an analytical specification (editorial changes may have a shorter notice period)
- Change of analytical specification limit outside current limits
- Change of manufacturing site
- Change to a different raw material

7.3 For Biacore instruments, spare parts & accessories
Changes for which notification is made prior to implementation:
- Change of company name
- Change of code numbers for spare parts
- Changes in critical dimensions and material changes on wetted parts, excluding consumables
- Change in spare parts that after exchange require the system to operate with specified software versions
- Change in components that result in alteration of the technical specification.

7.4 Other subjects notified through customer notification
- New editions of Software Notes

7.5 Discontinuation policy
Should GE Healthcare decide to discontinue any designated Biacore consumables product, customers registered for Change Control Notifications for that product shall be notified at least one year in advance.

For Biacore instruments, Change Control Notification will be sent out when production of the instrument is discontinued. This notification will include information about the End-Of-Service period. For spare parts on instruments installed by GE Healthcare, an End-of-Service notification will be sent to all customers one year before the service support period ends.

However, GE Healthcare reserves the right to discontinue a product within shorter time if and when regulatory or legal reasons prevent its manufacture or distribution.

This discontinuation policy applies only for products that are available for subscription to Change Control Notification on the web page www.gelifesciences.com/rsf (designated products).

8. Subscription to Change Control Notification
Customers can subscribe to notification of change control for the products listed on the web page below. Registration on the Regulatory Support web page www.gelifesciences.com/rsf is required for notification. At the web page, registrants must select each product to which notification is requested.

8.1 Notification content
The notification contains the following information:
- Identity of product (product name, product code number)
- Description of the change
- Reason for change
- Supporting data (when applicable)
- Updated specification when applicable
- Time-line for the change
9. Flow chart

Flowchart for the change control procedure.

- Request for change – basic data including output from the risk management process
- Decision by change control board
  - Requested change approved?
    - Yes
    - Is notification required?
      - Yes
      - Generate Notification letter
      - Implementation of change
  - No
    - Change control Review board minutes
  - No
    - Notification letter to customer
- Change documentation
- Archiving
10. Document owner

Customer Regulatory Support Leader

11. Revision history

<table>
<thead>
<tr>
<th>Revision Number</th>
<th>Section(s) Changed</th>
<th>Changes</th>
<th>Updated by</th>
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| 01              | ...vs. the two original documents: Introduction, Purpose, Definitions, Steering principles, Risk management of change, Customer notifications, Document Owner, Revision History | - This document replaces “Standard for GEHC Life Sciences Change Control Notification for Biacore Instruments and Software DOC 1668002 REV 1” and “Standard for GEHC Life Sciences Change Control process for Biacore consumables” DOC 1098501 REV 1”. The two documents have been merged to one, and therefore a new document number has been created. - Main changes are:  
  - Section “Reference” is removed.  
  - Additions to section “Definitions”.  
  - Additions and adjustments to section “Steering principles”.  
  - Additions to section “Customer notification”.  
  - Addition to section “Notification content”.  
  - Adjustment of “Flow chart” | Mats Tibell |