**Core KPI Operational Definitions**

**& Targets**

A diagram of tools and results

Description automatically generated

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**Add content explaining the scope and purpose of this document, explanations re: Core KPI’s, SQDCP, targets target-setting & maintenance process, etc.).**

# Safety

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| **Field Name** | **Explanation** |
| **Title** | **Total # Injuries** |
| **Description** | Total # of Events reported in the previous calendar month. Includes ALL injury types: minor, Serious, ATSM Serious, LIFE, etc. |
| **Purpose** | Tracks total injuries for PRD from the previous month and is a general indication of the health of the organization with respect to injuries.  Keeping Lilly employees safe is one way we show Respect for People, a core Lilly value. This is a lagging metric to demonstrate this value is monitored. Trending at management levels over time facilitates review and reaction to broader trends sometimes not seen by more frequent/area-specific monitoring. |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | **Steps required to determine the Total # of Injuries result for your local organization:**   1. Access the data source via the link provided in the Data Source(s) section below.    1. The default view will be ‘HeadsUp! Overview’. 2. Select the ‘HeadsUp! Event Review’ view. 3. Identify all entries there the ‘Date Occurred’ falls within the measurement date range. The count of these entries is the ‘Total # of Injuries’ result for your local organization. |
| **Data Source(s)** | [HeadsUp! 0PowerBi Metrics](https://app.powerbi.com/groups/me/apps/c0ef9a5b-8879-4901-a0ab-57be405e1de3/reports/063267c5-bc52-45c0-b996-780035b3d856/ReportSection198cee7b6b58a3929e91) (Sort by cost center). |

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| **Field Name** | **Explanation** |
| **Title** | **# of Serious Events** |
| **Description** | # of Heads Up! Events classified as LIFE Program Event, ASTM Serious Injury, or Serious |
| **Purpose** | A serious event is an event that requires treatment beyond First Aid (surgery, physical therapy, prescription-strength meds, injection). An ASTM Serious injury is an ERGO injury requiring surgery (more than first aid). A LIFE event is an event resulting in a fatality or life-altering injury/illness, or can also be considered a LIFE precursor (consideration of high-risk situation) or LIFE Near Miss (exposure to energy at or above the LIFE threshold).  Injuries for PRD from the previous month and is a general indication of the health of the organization with respect to injuries. Keeping Lilly employees safe is one way we show Respect for People, a core Lilly value. This is a lagging metric to demonstrate this value is monitored. Trending at management levels over time facilitates review and reaction to broader trends sometimes not seen by more frequent/area-specific monitoring.  Although all injuries are important to review, the level of time and effort to understand root cause and prevention should be commensurate with the risk. |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | Number of injuries reported as a LIFE event, Serious, or ASTM 1 in your area (i.e. under your M3 Management Org Chart) from the previous calendar month.  **Steps required to determine the # of Serious Events result for your local organization:**   1. Access the data source via the link provided in the Data Source(s) section below.    1. The default view will be ‘HeadsUp! Overview’. 2. Select the ‘HeadsUp! Event Review’ view. 3. Identify all entries there the ‘Date Occurred’ falls within the measurement date range. 4. Identify the entries with an Event Type equal to LIFE event, Serious, or ASTM 1. The count of these entries is the ‘# of Serious Events’ result for your local organization for the measurement date range. |
| **Data Source(s)** | [HeadsUp! PowerBi Metrics](https://app.powerbi.com/groups/me/apps/c0ef9a5b-8879-4901-a0ab-57be405e1de3/reports/063267c5-bc52-45c0-b996-780035b3d856/ReportSection198cee7b6b58a3929e91) (Sort by cost center). This is found by viewing the pre-populated “serious” metric for the date range you’re viewing (e.g. one month, 3 months for trending, etc) |

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| **Field Name** | **Explanation** |
| **Title** | **Safety Walks Performed** |
| **Description** | Safety walks performed for local area (Office and Operational Workspaces) |
| **Purpose** | Where most H&S metrics are considered lagging, this metric can be considered leading, or preventative. Safety Walks are an accessible, quick, and practical tool used at Lilly to ensure safe habits are monitored and practiced in the physical areas in which we work. Here, real-time corrections and conversations can be performed, correcting or reinforcing good behavior. |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | Count the number of times within the measurement time period that a Safety Walk (i..e, an activity that conforms to the criteria outlined below) has taken place.  Safety Walk Criteria:  A safety walk can also be called an “area safety inspection” as a “walk” may not need to occur. Some areas within PD are work-from-home or considered “primarily desk-based” while others are “manufacturing/operations/floor/lab-based.” This understanding is a basis for how this metric should be calculated.  In all cases, a safety walk is required, regardless of work environment. Expectations for safety “walks” may vary significantly based on an understanding of that area as described above. Each M3 or designated safety rep will determine their safety walk requirements but must consider the work environment for all FTE employees within their org.  For example, Work from Home roles may fulfill this requirement via e.g. a completed desk inspection verified by a 1:1 conversation (ergo-focused positioning and equipment available); for in office desk-based work a review of Wellnomics / Workpace settings could occur, or an area walkthrough may occur in the form of checking for trip hazards or unauthorized heating elements, etc. For manufacturing-based spaces true area walk-throughs, 5S reviews, GEMBA walks, etc. should occur, with proper safety training as an underpinning (hearing, fall protection, etc. as deemed necessary). |
| **Data Source(s)** | Local PD Safety Team Member or M3 performing local “walkthroughs” with management, as defined by their group. |

# Quality

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| **Field Name** | **Explanation** | |
| **Title** | **Quality Backlog** | |
| **Description** | Backlog is a measure of quality system items that present significant GxP compliance risk by not being completed on time by their due date.  Backlogs are the identified items that have been overdue at the end of the month. **Out of scope:** items (e.g. Deviations, Changes), that occurs at or is identified by and investigated by external organizations. | |
| **Purpose** | Monitor significant GxP compliance risk and it is an indicator of quality culture. | |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. | |
| **Measurement Frequency** | Monthly | |
| **Calculation** | **Quality Backlog consists of the following items**:   1. All minor, moderate, and major deviations overdue, nor approved by due date. 2. Deviation action overdue, action has not closed by due date. 3. Deviation Effectiveness Check Overdue: Effectiveness check not completed and approved by due date.    1. *Note: do NOT include deviations awaiting implementation of actions that have not been completed by effectiveness due date.* 4. Change Overdue, approved change (change & major) which is not in awaiting evaluation or closed by due date. 5. Change Evaluation Overdue: Change Controls evaluation not completed and approved by due date. 6. Intra Company Issues overdue: ICI not closed by due date (>30 days). 7. Quality Plan overdue, Q. Plan (WT/WI/WA) not closed by due date. 8. Quality Plan Items evaluation overdue: Q. Plan Items (WI only) evaluations not completed and approved by due date. 9. Site Self Inspections-related work items or work action (WI/WA) not closed by the due date. 10. PR&D Q System Documents periodic review overdue (PR&D QS Doc PR): PR&D Q. System documents (Standards & Procedures,) periodic review not completed (document in Effective status) by the periodic review dates.   **Steps required to determine the Quality Backlog result for your local organization:**   1. Access the data source via the link provided in the Data Source(s) section below. 2. In the QLT Group Filter, select the CSD QLT only. 3. In the bar chart, click on the year / month label of interest 4. Identify all entries in the resulting list that are assigned to employees within your local organization by reviewing the names in the ‘Assigned To’ column. 5. Count the number of ‘Overdue’ entries assigned to individuals in your local organization. This is the ‘Quality Backlog’ result for your local organization for the month. | |
| **Data Source(s)** | [PRD Backlog snapshot Metrics - Power BI](https://app.powerbi.com/groups/me/reports/dd47febc-7450-4610-bbdd-ff934b654093/ReportSectiona6d4f6594d20e92a2799?experience=power-bi) | |
| **Field Name** | | **Explanation** |
| **Title** | | **Quality Items Overdue** |
| **Description** | | Quality Items Overdue is a measure of quality system items that present significant GxP compliance risk by not being completed on time by their due date. Overdue items are the identified items that have been overdue at a “real time” that differed from Backlog which are the items that have been overdue at the end of the month. |
| **Purpose** | | Monitor significant GxP compliance risk. |
| **Target** | | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | | **Refer to the Description provided for the Quality Backlog metric for further details regarding what the Quality Items Overdue metric consists of.**  **Steps required to determine the Quality Items Overdue result for your local organization:**   1. Access the data source as follows:    1. Access the Power BI Report via the link provided in the Data Source(s) section below.    2. Select the ‘Future Backlog’ from within the Pages column to the left. 2. Review all entries where the Overdue Status = ‘Overdue’. 3. Identify all ‘Overdue’ entries assigned to employees within your local organization by reviewing the names in the ‘Assigned To’ column. 4. Count the total number of ‘Overdue’ entries assigned to individuals in your local organization. This is the ‘Quality Items Overdue result for your local organization. |
| **Data Source(s)** | | [PRD TrackWise Metrics - Power BI](https://app.powerbi.com/groups/me/reports/dd47febc-7450-4610-bbdd-ff934b654093/ReportSection3b393162b90a2b2a6a7a?experience=power-bi) |

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| **Field Name** | **Explanation** |
| **Title** | **Quality Items Coming Due** |
| **Description** | The Quality Items Coming Due metric is essentially the same as the Quality Items Overdue metric. The only difference: whereas ‘Overdue’ is defined by an open record not being completed on time by their due date. ‘Coming Due’ is defined by an open record that is within 7 calendar days of the due date. |
| **Purpose** | Monitor significant GxP compliance risk. |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | **Refer to the Description provided for the Quality Backlog metric for further details regarding what the Quality Items Overdue metric consists of.**  **Steps required to determine the Quality Items Overdue result for your local organization:**   1. Access the data source as follows:    1. Access the Power BI Report via the link provided in the Data Source(s) section below.    2. Select the ‘Future Backlog’ view from the Pages column to the left. 2. Review all entries where the Overdue Status is blank. 3. Filter on entries with a Due Date within 7 calendar days from the current date. 4. Identify all entries assigned to employees within your local organization by reviewing the names in the ‘Assigned To’ column. 5. Count the total number of entries meeting all criteria provided in Steps 2 ~ 4. This is the ‘Quality Items Coming Due’ result for your local organization. |
| **Data Source(s)** | [PRD TrackWise Metrics - Power BI](https://app.powerbi.com/groups/me/reports/dd47febc-7450-4610-bbdd-ff934b654093/ReportSection3b393162b90a2b2a6a7a?experience=power-bi) |

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| **Field Name** | **Explanation** |
| **Title** | **Deviations unapproved > 30 Days** |
| **Description** | All minor/moderate/major deviations that went past 30 days before approval (unapproved) at any time during a target time-period.  Applies only to deviations within Lilly. Deviations that occur at or is identified by and investigated by external organizations are out of scope for this KPI. |
| **Purpose** | Drive timely completion of deviations. |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | **Steps required to determine the # of Deviations unapproved > 30 Days result for your local organization:**   1. Access the data source as follows:    1. Access the Power BI Report via the link provided in the Data Source(s) section below.    2. Select the 1***st*** of the 2 ‘Dev: > 30 Days’ views from the Pages column to the left. 2. Review all entries. 3. Identify all entries that are:    1. Assigned to employees within your local organization by reviewing the names in the ‘Assigned To’ column.    2. Where the ‘Status Category’ ≠ ‘Done’ (or any variation of ‘Done’).    3. Where the ‘Created + 30 Days’ date falls within the measurement time period. 4. Count the total number of entries assigned to individuals in your local organization. This is the ‘Deviations unapproved > 30 Days result for your local organization. (2/23/2025- for prototype we are gone to sort by cost center for tier 3 and tier 4) |
| **Data Source(s)** | [PRD TrackWise Metrics - Power BI](https://app.powerbi.com/groups/me/reports/dd47febc-7450-4610-bbdd-ff934b654093/ReportSection288b9614506f1ab62c3d?experience=power-bi) |

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| **Field Name** | **Explanation** |
| **Title** | **Total Deviations: (Minor Deviation, Moderate Deviations, Major Deviations)** |
| **Description** | For deviation definition and classification see GQS104. Applies only to deviations within Lilly. **Deviations that occur at or is identified by and investigated by external organizations are out of scope for this KPI.** |
| **Purpose** | Measure total number of deviations to identify opportunities for improvements. |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | **Steps required to determine the Total Number of Deviations created during the measurement time period for your local organization:**   1. Access the data source as follows:    1. Access the Power BI Report via the link provided in the Data Source(s) section below.    2. Select the ***1st*** of the 2 ‘Dev: Classification’ views from the Pages column to the left. 2. Use the date filter at the top of the screen to narrow in on the relevant content. 3. Identify all entries related to your local organization by reviewing the ‘TR Desc or Title (first 500 characters)’ field. This is the ‘Total Number of Deviations’ result for your local organization for the measurement time period. |
| **Data Source(s)** | [PRD TrackWise Metrics - Power BI](https://app.powerbi.com/groups/me/reports/dd47febc-7450-4610-bbdd-ff934b654093/ReportSection43e8dbf0402221ce02d4?experience=power-bi) |

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| **Field Name** | **Explanation** |
| **Title** | **Personnel Qualification: % of personnel with 100% training completion.** |
| **Description** | % Of Personnel with 100% training completion. |
| **Purpose** | Ensure all personnel, including Lilly and contract personnel, are qualified to perform their duties per PRD 1-30 |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | **Steps required to determine the % Of Personnel with 100% training completion during the measurement time period for your local organization:**   1. Access the data source via the link provided in the Data Source(s) section below. 2. Select the ‘LRL Training Metrics (Supervisors & Sponsors Only) tile. 3. Select the ‘Learning Plan Compliance – Live Data’ report. 4. Navigate to the data for your local organization (note: the default view should be set to your local organization based on ‘org chief’ assignment). This is the ‘% Of Personnel with 100% training’ result for your local organization for the measurement time period. |
| **Data Source(s)** | [Welcome to LEARN - LRL Expertise and Resources Now! (lilly.com)](https://collab.lilly.com/sites/LRL-LD) |

# Delivery

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| **Field Name** | **Explanation** |
| **Title** | **Cycle Time** |
| **Description** | Cycle time is the total time it takes to produce an item or provide a service or information, measured from the start of the first task to the end of the last task. |
| **Purpose** | A consistent demonstration of actual cycle times that are ≤ planned cycle times represents a process tht is ‘in control and capable’, thus allowing an organization to provide accurate quotes on delivery dates. In addition, alignment of actual cycle times to planned cycle times is critical for accurate planning. |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| **Calculation** | Calculation example, to be applied to each value stream, value stream segment or process step being monitored:   |  |  |  | | --- | --- | --- | | **Ref ID** | **Calculation Term** | **Example Value** | | A | # of work units**1** > target cycle time | 15 | | B | # of work units**1** completed in the measurement time period | 216 | | C | A/B = % work units > target cycle time | 7% | | D | 1-C\*100% = work units ≤ target cycle time | 93% |   **1** Work units defined by each value stream segment (e.g., batches, or orders, or…). |
| **Data Source(s)** | Refer to Appendix 2 for Segment-Specific data sources. |

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| **Field Name** | **Explanation** |
| Title | **On-Time Delivery vs. Original Commit Date** |
| Description | On-Time Delivery vs. Original Commit measures the actual date of delivery (i.e., completion of the related transaction) in comparison to the due date that existed in the associated planning system at the time of transaction initiation (e.g., process order release, purchase order release, etc.)  If the actual date of delivery ≤ the due date, then the related transaction is considered ‘on-time’. Else, the transaction is ‘late’. |
| Purpose | Our ability to accurately quote delivery at the time of transaction / process initiation, with ‘accurate’ defined as the consistent ability to deliver on or before that originally quoted date, instills confidence in our capabilities as a delivery organization and demonstrates that we are ‘in control and capable’.  This KPI directly represents the organizational ability to abide by the Operational Excellence Principle ‘Maintain Commitments’. |
| **Target** | 1. Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| Calculation | Calculation example, to be applied to assessment of performance to original commit date and to current commit date, respectively, at each value stream segment and the overall value stream:   |  |  |  | | --- | --- | --- | | **Ref ID** | **Calculation Term** | **Example Value** | | A | # of orders**1** shipped where delivery date > commit date in a given time period. | 15 | | B | # of orders**1** shipped in the same time period. | 100 | | C | A/B = % of orders**1** shipped where delivery date > commit date in a given time period. | 15% | | D | 100% - C = % On Time Delivery | 85% |   **1** the term ‘order’ is a general term used to refer to any material, service, or information being provided. |
| **Data Source(s)** | Refer to Appendix 2 for Segment-Specific data sources. |

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| **Field Name** | **Explanation** |
| Title | **On-Time Delivery vs. Current Commit Date** |
| Description | On-Time Delivery vs. Current Commit measures the actual date of delivery (i.e., completion of the related transaction) in comparison to the due date that exists in the associated planning system at the time of delivery.   1. If the actual date of delivery ≤ the due date, then the related transaction is considered ‘on-time’. Else, the transaction is ‘late’. |
| Purpose | Good customer service, as represented by on time delivery is a fundamental goal of the value stream.  Achievement of this date is accomplished via two ways, in order of preference:   1. Delivery on the original due date assigned or 2. Maintenance of valid due dates in the planning system such that they represent the current best-known date of delivery.   *Given the requirement and ability to do this, a ‘late’ transaction should be the exception.* |
| **Target** | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| Calculation | Calculation example, to be applied to assessment of performance to original commit date and to current commit date, respectively, at each value stream segment and the overall value stream:   |  |  |  | | --- | --- | --- | | **Ref ID** | **Calculation Term** | **Example Value** | | A | # of orders**1** shipped where delivery date > commit date in a given time period. | 15 | | B | # of orders**1** shipped in the same time period. | 100 | | C | A/B = % of orders**1** shipped where delivery date > commit date in a given time period. | 15% | | D | 100% - C = % On Time Delivery | 85% |   **1** the term ‘order’ is a general term used to refer to any material, service, or information being provided. |
| **Data Source(s)** | Refer to Appendix 2 for Segment-Specific data sources. |

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| **Field Name** | **Explanation** |
| Title | **Order Stability** |
| Description | Order Stability measures all orders inside the time fence (for Packaging planned or process orders) or supplier lead time (for Purchase Orders) that do not change due dates. Changes to the order schedule should be minimized and be the last resort after other options have been analyzed, to conform to the original schedule.  **Note**: while work not governed by Process Orders or Purchase Orders may differ transactionally, the concept applies: once work is released into the process, to what extent do we promote stability / minimize change? |
| Purpose | Changes to an order’s scheduled due dates inside the time fence or lead time can have a ripple effect that magnifies over time throughout the value stream. In addition, the instability represented by significant levels of date changes typically represents and / or manifests as ‘switching waste’ and other forms of non-value adding activity / burden on those who execute or support value stream processes. |
| Methodology | **For Packaging Process Orders:**  Count the number of orders impacted by Date Change Forms throughout the period of measurement and compare to the number of active orders plus orders due to begin during the period of measurement as of the first day of that period.  **For Purchase Orders:**  Capture the due date of the order when it crosses inside the time fence (for Process Orders) or the Supplier Lead Time (for Purchase Orders).  Compare due date of the order each week to date that was originally captured.  Count number of orders for which the due date changes. |
| Target | Refer to Appendix 1: Targets for the current Tier 3 and Tier 4 values. |
| **Measurement Frequency** | **Measurement and monitoring should occur no less than weekly**. If the target is set for a larger time-period than the measurement frequency (e.g. a monthly target), accumulate the reported values until the sum of measurement time-periods = the target time-period. |
| Calculation | **For Process Orders:**  **Option 1 (using Date Change forms):**   * Each month, pull number of active packaging orders and number of forecasted orders with start dates within the next 30 days. (“Total Active Orders”) * Count the number of orders impacted on Date Change Forms * Stability is measured as a percentage using the following formula:   Total Active Orders – Total Number of Changes  Total Active Orders  **Option 2 (using Master Schedule Stability SAP Transaction ZS055:**   * Each week, all process orders and planned orders with due dates inside the product’s time fence are saved. For each order, this information is compared to the previous week’s information. * Stability is measured as a percentage using the following formula:   Total # of orders with no changes (within tolerance)  Total # of orders saved  **For Purchase Orders, using PO Stability SAP Transaction ZS162:**   * Each week, for all open purchase orders with due dates inside the supplier lead-time, the due dates are captured. For each order, this information is compared to the previous week’s due date. * Stability is measured as a percentage using the following formula:   Total number of PO with no qty or date changes (within tolerance) inside the supplier lead-time  Total number of PO inside the supplier lead-time  **Note:** *Purchase Orders cancelled inside the lead time count as misses.*  For work not governed by SAP Process Orders or Purchase Orders:   |  |  |  | | --- | --- | --- | | **Ref ID** | **Calculation Term** | **Example Value** | | A | # of orders**1**  in a given time period where a change to the current commit date > commit date at the beginning of that time period, per the stated tolerance. | 15 | | B | # of orders**1** open at any time in the same time period. | 100 | | C | A/B = % in a given time period where a change to the current commit date > commit date at the beginning of that time period, per the stated tolerance. | 15% | | D | 100% - C = % Order Stability | 85% |   **1** the term ‘order’ is a general term used to refer to any material, service, or information being provided. |
| **Data Source(s)** | Refer to Appendix 2 for Segment-Specific data sources. |

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| **Field Name** | **Explanation** |
| Title | **WIP Past Due vs. Original Commit Date** |
| Description | WIP Past Due vs Original Commit Date measures the amount of work in progress on a particular date that is past due when compared to the due date that existed in the associated planning system at the time of transaction initiation (e.g., process order release, purchase order release, etc.) |
| Purpose | When monitored alongside On-Time Delivery Actual vs Original Commit Date, WIP Past Due vs. Original Commit Date provides the organization with visibility to the flow of work through the system. In addition, whereas WIP Past Due vs. Current Commit Date serves as an indicator of effective due date management in the planning system, WIP Past Due vs. Original Commit provides the truest representation of ‘backlog’. |
| Methodology | **For Purchase Orders (ZS118):**  1. Calculate the difference between all past due purchase order due dates (referred to as “Item Delivery Date” in SAP) and the current date.  2. Any purchase order or stock transfer order for which the difference is greater than 0 working days is counted as a miss in the measure.  This report is used to alert buyers of the past due situation so that they can appropriately reschedule the expected delivery date on the PO line. The expectation is that each PO line that appears on this report will be investigated by the buyer to find out why it is late and when it will arrive, and the PO is then updated accordingly.  **Note**: If the PO line is associated with the triangular sales process and an inbound delivery has been created against it (will be shown in inbound delivery column), no changes should be made to the PO line as it will cause an interface failure.  Users can click on the PO number to open the PO through ME23N, which should help in the investigation. Quantity ordered and quantity received are shown to assist the user in determining if the order already had a partial receipt. If no further receipts are anticipated, then the order line needs to be closed so that it will no longer appear on this report and the system will no longer expect the delivery.  The expected delivery date shown on the report is the schedule line delivery date and is not the statistical delivery date. The statistical delivery date is the original or renegotiated due date established with the vendor and is used for the Supplier on time metric.  When a supplier cannot meet the statistical delivery date, the expected delivery date is adjusted to match the new promise. The Purchase Orders Past Due report uses the item delivery date (expected). The number of days past due shows how late the order is based on the factory calendar and does not consider any tolerance (tolerance is considered only when deciding which orders to include in the report).  **For Process Orders (ZS114):**   1. Calculate the difference between all process order due dates and the current date. 2. Any process order for which the difference is greater than 0 working days is counted as a miss in the measure. |
| Target | Zero |
| Minimum Measurement Frequency | Monthly (unless required more frequently by calculation method). |
| Calculation | * Calculate the difference between all open order**1** due dates and the current date. * Any order**1** for which the difference is greater than 0 days is counted as a miss.   **1** the term ‘order’ is a general term used to refer to any material, service, or information being provided. |
| Data Source(s) | * Refer to Appendix 2 for Segment-Specific data sources. |

|  |  |
| --- | --- |
| **Field Name** | **Explanation** |
| Title | **WIP Past Due vs. Current Commit Date** |
| Description | WIP Past Due vs Current Commit Date measures the amount of work in progress on a particular date that is past due when compared to the current due date in the associated planning. |
| Purpose | Maintaining accurate due dates is critical to maintaining the integrity of the planning system, for the creation of valid schedules and for effective resource and action planning. As such WIP Past Due vs Current Commit Date is clear indicator of the extent to which this maintenance is occurring.  *When performing this measurement, a result greater than ‘0’, should be the exception.* |
| Methodology | **For Purchase Orders (ZS118):**  1. Calculate the difference between all past due purchase order due dates (referred to as “Item Delivery Date” in SAP) and the current date.  2. Any purchase order or stock transfer order for which the difference is greater than 0 working days is counted as a miss in the measure.  This report is used to alert buyers of the past due situation so that they can appropriately reschedule the expected delivery date on the PO line. The expectation is that each PO line that appears on this report will be investigated by the buyer to find out why it is late and when it will arrive, and the PO is then updated accordingly.  **Note**: If the PO line is associated with the triangular sales process and an inbound delivery has been created against it (will be shown in inbound delivery column), no changes should be made to the PO line as it will cause an interface failure.  Users can click on the PO number to open the PO through ME23N, which should help in the investigation. Quantity ordered and quantity received are shown to assist the user in determining if the order already had a partial receipt. If no further receipts are anticipated, then the order line needs to be closed so that it will no longer appear on this report and the system will no longer expect the delivery.  The expected delivery date shown on the report is the schedule line delivery date and is not the statistical delivery date. The statistical delivery date is the original or renegotiated due date established with the vendor and is used for the Supplier on time metric.  When a supplier cannot meet the statistical delivery date, the expected delivery date is adjusted to match the new promise. The Purchase Orders Past Due report uses the item delivery date (expected). The number of days past due shows how late the order is based on the factory calendar and does not consider any tolerance (tolerance is considered only when deciding which orders to include in the report).  **For Process Orders (ZS114):**   1. Calculate the difference between all process order due dates and the current date. 2. Any process order for which the difference is greater than 0 working days is counted as a miss in the measure. |
| Target | Zero |
| Minimum Measurement Frequency | Monthly (unless required more frequently by calculation method). |
| Calculation | * Calculate the difference between all open order**1** due dates and the current date. * Any order**1** for which the difference is greater than 0 days is counted as a miss.   **1** the term ‘order’ is a general term used to refer to any material, service, or information being provided. |
| Data Source(s) | * Refer to Appendix 2 for Segment-Specific data sources. |

# Appendix 1

# Targets

**Safety**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **KPI Title** | **Tier 4** | **Tier 3** | **Target Clarifications** | **Effective Date** | **Comments** |
| Total # Injuries | 2\* | 0 | ≤ 2 = Green, ≥ 3 = Red, per month. | 3-1-24 | Will revisit the target in early Q3. |
| Serious Events | 0 | 0 | 0 = Green, ≥ 1 = Red, per month. |  |
| Safety Walks Performed | 1 | 1 | ≥ 1 = Green, 0 = Red, per month. |  |

**Quality**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **KPI Title** | **Tier 4** | **CDS** | **CT Dist** | **K358** | **K401** | **Labeling** | **NDP** | **Packaging** | **Target Clarifications** | | **Effective Date** | **Comments** |
| Total deviations | 43 | 6 | 3 | 15 | 10 | 4 | 6 | 14 | Per month. | | 4-1-24 | Will revisit the target in early Q3. |
| Major | 0 | Monitored / No target | | | | | | |  |
| Moderate | 14 |  |
| Minor | 29 |  |
| Deviations unapproved > 30 Days | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Per month. | |  |
| Total number of complaints | 30 | N/A | | | | | | | | Per month. |  |
| Quality Backlog | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Per month. | | Will revisit the target in early Q3. |
| Quality Backlog Items Overdue |  |  |  |  |  |  |  |  | No Target – monitor only, ≥ weekly. | |  |
| Quality Backlog Items Due in 7 Days |  |  |  |  |  |  |  |  | No Target – monitor only, ≥ weekly. | |  |
| % Personnel Qualification | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | % Training Complete by Due Date | |  |

**Delivery**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **KPI Title** | **Tier 4** | **CDS** | **CT Dist** | **K358** | **K401** | **Labeling** | **NDP** | **Packaging** | **Target Clarifications** | **Effective Date** | **Comments** |
| Stability |  |  |  |  |  |  |  |  |  |  |  |
| Cycle Time |  |  |  |  |  |  |  |  |  |  |  |
| On-Time Delivery vs. Original Commit Date |  |  |  |  |  |  |  |  |  |  |  |
| On-Time Delivery vs. Current Commit Date |  |  |  |  |  |  |  |  |  |  |  |
| WIP Past Due vs. Original Commit Date |  |  |  |  |  |  |  |  |  |  |  |
| WIP Past Due vs. Current Commit Date |  |  |  |  |  |  |  |  |  |  |  |

# Appendix 2

# Segment-Specific Operational Definitions for Delivery Core KPIs

**Packaging**

|  |  |
| --- | --- |
| **Metric Name** | **Definitions** |
| Cycle Time | Number of orders with 2010 completion date of previous week, compared to orders complete within recipe target (allocation actual to 2010 actual). POR source. |
| On Time Delivery Actual vs Current Commit Date | Number of orders with 2010 completion date of previous week, compared to number of orders closed on or before current commit date. POR source. |
| On Time Delivery Actual vs Original Commit Date | Number of orders with 2010 completion date of previous week, compared to number of orders closed on or before original commit date. POR source. |
| Order Stability | Natalie to populate |
| WIP Past Due vs Current Commit Date | All active open orders where the 1010 date is complete, compared to number of open orders with 2010 due date in the past. POR source. |
| WIP Past Due vs Original Commit Date | All active open orders where the 1010 date is complete, compared to number of open orders with original 2010 due date in the past. POR source. |

# Appendix 3

# Detailed Instructions for Reporting Delivery KPI’s

The following pages contain excerpts from the CD&OP Playbook (Draft), used as a basis for drafting related Delivery Core KPI Op Def’s, which will be modified to support the new Op Def’s while maintaining the detailed instruction for executing the reporting, as applicable:

* Supplier On-Time & In-Full (OTIF)
* Conformance to Master Schedule
* Master Production Schedule Stability

|  |  |
| --- | --- |
| **Measurement** | **Supplier On-Time & In-Full (OTIF)** |
| **Description** | Good customer service and on-time delivery is a fundamental goal of Product Delivery (PD). Service level is defined as consistently meeting all customer needs related to delivery of product. PD is considered a make-to-order (MTO) business. |
| **Measurement Goal:** | 85% |
| **SAP Transaction:** | ZS120 |
| **Tolerance:** | * **For Materials Management**; On Time is unlimited days early not more than 10  days late for goods receipt compared to the Stat Del date, early is always acceptable. In Full is +/-10% of ordered quantity * **For NDP**; On Time is not more than 90 days early and 10 days late for goods receipt compared to the Stat Del date. In Full is not less than 50% of the ordered quantity and unlimited overage. * **For US Pkg**; On Time not more than 5 days late for goods receipt compared to the Stat Del date. * **For EU Pkg**; this metric is not kept. |
| **Measurement Frequency** | Monthly |
| **Calculating OTIF Metric** | 1. Determine the total number of orders that were shipped during the month being measured. 2. Determine the total number of orders shipped during the month that were within tolerances. 3. Calculate On-time Delivery using the following formula:   Orders Shipped Within Tolerance .  Orders Shipped + Open Past Due Orders   1. Determine root cause, create Pareto chart, and develop course of action to minimize reoccurrences for all misses. |
| **Pulling the Metrics** | * The NDP and FING Plant Planner, Materials Management and Commercial Products Buyer Planner are responsible to pull this metric * See below for a screenshot on how to update reason codes in SAP for each Miss |
| **Changing Dates after PO Release** | * There are 2 dates maintained within each Purchase Order (PO) * **Delivery Date** – date used for planning in SAP * **Stat Del Date** - Calculation of the delivery time is an element in the determination of a CPs adherence to delivery dates (that is, the vendor's delivery timeliness, or on-time delivery performance) * If it becomes known that the CP can only deliver material later than originally stipulated, you can change the **delivery date** accordingly for materials planning and control purposes. However, the **stat del date** (statistics-relevant delivery date) remains unchanged. As a result, the vendor's OTIF is considered a miss if they deliver to the adjusted delivery date. At the same time, it is ensured that materials planning and control works on the basis of the right date. * If there is a change to Lilly’s plan, a delay to a study, both the **delivery date** and the **Stat Del Date** may both be moved to a later date. This reduces unnecessary inventory. |
| **SAP Reason Codes** | * TBD |
| **Related Transactions** | * On-Time PO Release * Purchase Order Stability |

Graphical user interface, application, table, Excel

Description automatically generated

Dates

match

Date used to measure CP performance

When reviewing the ZS120 report in SAP, each metric miss is indicated as ‘NO’ in the report. By clicking on ‘NO’, a pop-up will appear and a reason code can be selected and saved in SAP.

Table

Description automatically generated

|  |  |
| --- | --- |
| **Measurement** | **Conformance to Master Schedule** |
| **Description** | Conformance to the master production schedule measures PD’s adherence to the master schedule (i.e., did we make the right quantity at the right time). The master schedule is generated to meet PD’s customer service, inventory and budget targets. Not meeting the master schedule can jeopardize meeting these objectives. For PD, Conformance to Master Schedule is used solely for Packaging Process Orders. |
| **Measurement Goal:** | ≥70% |
| **SAP Transaction:** | ZS054 / SAP R3 (GPR) |
| **Tolerance:** | * Quantity: PD not measuring a tolerance around quantity. * Date: No more than 5 days late, with no penalty for early completion. |
| **Measurement Frequency** | Monthly |
| **Calculating MPS Conformance Metric** | 1. Conformance to master schedule is measured for FING and Brightstock Packaging Orders. 2. When a master scheduled order (planned or process order) crosses its time fence, the final due date and order quantity are saved. Upon quality approval of the order, the actual quality approved date and completed quantity are captured and compared to the saved date and order quantity. 3. If the actual approved date and quantity match the final due date and order quantity saved at the time fence within the tolerance, the order is considered completed within tolerance. (Remember, PD is focused on dates, and although the SAP transaction saves and compares the quantities, PD does not include quantity misses in their metrics.) 4. Cancelled/Deleted Orders:    1. Process Orders cancelled within the time fence (MPS Key = 99) are always counted as a “MISS” in quantity and date.    2. If a Planned Order with an exception message of “30 – Plan process according to schedule.” is deleted (MPS Key = 99) after 7 days of it entering into the time fence, then it is counted as a “MISS” (order cancelled). 5. Conformance is measured as a percentage using the following formula:   Actual orders completed within date tolerance (“HITS”)  Total number of orders completed   1. Determine root cause for each “MISS”, and determine if “MISS” was a cancelled order, rescheduled order, or a drop in order. Create Pareto chart and develop course of action to minimize reoccurrences for all misses. |
| **Pulling the Metrics** | * Supply Chain Consultant pulls the metric using the ZS054 transaction in SAP R3 (GPR), downloads a copy of the data, and completes the Pareto analysis for root causes, each month. * Data sources used for Root Cause analysis include:   + TECO forms   + Date Change forms   + PD Flow Database * Determining the type of change for the order, involves the MPS Key.   + MPS Key = 00: Planned order was not converted to a process order   + MPS Key = 01: Planned order converted to process order - likely that order was moved out/rescheduled   + MPS Key = 02: Planned order was split into multiple process orders   + MPS Key = 03: Process order created without a planned order – likely that order was a drop-in   + MPS Key = 04: Process order was created with a due date outside of the time fence   + MPS Key = 99: Process order cancelled inside the time fence, or Planned order cancelled after 7 days inside the time fence (see note above). |
| **Report Out** | * MPS Conformance results are reported at:   + CD&OP Operations Review   + PDOT CD&OP Review   + PDLT CD&OP Review |
| **Guidance for changing dates for Process Orders** |  |
| **SAP Reason Codes** | * Enabled in SAP at point of Process Order change. (Not available for planned orders.) * List TBD |
| **Related Transactions** | * On-Time In-Full * MPS Stability |

|  |  |
| --- | --- |
| **Measurement** | **Master Production Schedule Stability - HOLD** |
| **Description** | Master schedule stability measures the degree of change in the schedule by looking at all planned orders inside the time fence and all process orders that do not change due dates. While it is critical to keep the dates and quantities for orders in the master production schedule up to date, at a higher level, the goal is to conform to the original master production schedule. To that end, changes to the master production schedule should be minimized and should be the last resort after other options have been analyzed. Changes to PD’s master production schedule can have a ripple effect through the supply chain that magnifies over time. |
| **Measurement Goal:** | ≥75% |
| **SAP Transaction:** | ZS055 / GPR (R3) |
| **Tolerance:** | * Quantity: PD not measuring a tolerance around quantity. * Date: No more than +/- 2 days from the original scheduled due date. |
| **Measurement Frequency** | Weekly |
| **Calculating MPS Stability Metric** | 1. Each week, all process orders and planned orders with due dates inside the item’s time fence are saved. For each order, this information is compared to the previous week’s information. 2. Stability is measured as a percentage using the following formula:   Total # of orders with no date or quantity changes  (within tolerance) inside the time fence  Total # of orders inside the time fence   1. Orders cancelled or added, inside the time fence, count as misses. 2. Determine root cause, create Pareto chart, and develop course of action to minimize reoccurrence for all misses. |
| **Pulling the Metrics** | * Supply Chain Consultant pulls the metric, and completes the Pareto analysis for root causes, each month. * Data sources used for Root Cause analysis include:   + TECO forms   + Date Change forms   + PD Flow Database |
| **Report Out** | * MPS Stability results are reported at:   + CD&OP Operations Review   + PDOT CD&OP Review   + PDLT CD&OP Review |
| **Guidance for changing dates for Process Orders** |  |
| **SAP Reason Codes** | * TBD |
| **Related Transactions** | * On-Time In Full * MPS Conformance |

# Appendix 4

# Operational Definition Template

|  |  |
| --- | --- |
| **Field Name** | **Explanation** |
| **Title** | What (should) we all call the KPI? |
| **Description** | What does the KPI mean? What is it designed to represent / convey? |
| **Purpose** | Why is it important for us to monitor this KPI; why should we care about our performance against this measurement? |
| **Target** | What is the specific target that must be achieved to be ‘green’? *Note: this value must be defined by the Leader role(s) responsible for the activities that this KPI represents*. There will be some KPI ‘s where a ‘Product-Delivery-wide’ target is established that is adopted by each VS Node. Conversely, there will be some KPI’s where the target can only be established at the individual node level. Lastly, there may be some KPI’s where a ‘PD-wide’ target is established that is then ‘decomposed’ into assigned VS Node-specific targets that add up to the PD-wide target.  *If the target(s) is / are readily available / known, please capture. However, if the target(s) is / are not readily available / known, do not spend time pursuing determination of the target at this time; we will address this during the review & approval process*. |
| **Measurement Frequency** |  |
| **Calculation** | Provide the exact calculation to used when generating this KPI. |
| **Data Source(s)** | Be specific, i.e., systems / transaction codes / data tables, etc. Whatever is ‘reasonable’ and necessary to capture to facilitate consistency in measurement. |