

## Schedule 2 (Specification) Appendix 1

### Functional Requirement Headings Explained

**R1?** : Is it in scope for Release 1 Delivery? - Yes or No

**M/S** : Is it a Must or Should Requirement

Must will need to be delivered as part of the Supplier's solution

Should is desirable, but not essential. Catering for these in the Supplier's solution will be looked on favourably for scoring the User Lens.

## Annex A – Rostering Functional Requirements

ID	The Supplier's solution shall provide the capability to	R1?	M/S
<b>Maintain Staff &amp; Roster Data</b>			
F01.001	for authorised staff, such as those with a System Owner (Business) Persona, to create and thereafter enable updates to Concept of Operations Incident Management Role definitions. These are to be based on information to be supplied by the Environment Agency which will include Incident Role Name; Relevant Skills and Minimum Skill Level; Certifications; and Experience Level Description.	Y	M
F01.002	for authorised staff, such as those with a System Owner (Business) Persona, to create and thereafter maintain new roles that are not established Concept of Operations roles and make these available for future use. These new tactical roles are likely to be temporary and may only relate to specific incidents, so will need to be able to be removed when no longer required.	N	S
F01.003	for authorised staff, such as those with an Administrator or Incident Administrator Persona, to be able to enter and update notes regarding logistics/rostering requirements on each role in order to provide duty staff and rosterers with supplementary information.	Y	S
F01.004	to access core personal data about Defra Group and Environment Agency staff that enables them to be effectively rostered by facilitating contact using normal work contact details and other personal contact details that the person has agreed to.	Y	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F01.005	to search for staff to assign to rosters based on their name, location, skills, incident roles, and availability (based on either calendar/employee status) then once found access staff details including name, Environment Agency Area, role, contact details and working pattern.	Y	M
F01.006	to be able to define welfare rules on how many duty/standby/shifts staff are allowed to work within a particular time period, how long these shifts can be based on the role, required rest periods, and for these to be enforced when allocating shifts, albeit with the ability to override these with appropriate justification comments.	Y	M
F01.007	for staff to be able to view and update their own availability and limited personal contact data (e.g., personal mobile that is not held in Active Directory which is the Master Record for Staff contact details).	Y	M
F01.008	to hold details on staff and notifications each staff member should be receiving and when they should receive them. The notification trigger points should be configurable	Y	M
F01.009	to trigger notification/alert when recommended shift allocation limit within a specified time period has been reached	Y	M
F01.010	to trigger notifications/alerts when a staff member has worked the maximum number of hours allowed before recommended rest periods	Y	M
F01.011	to trigger notification/alert when a staff member is rostered more than recommended number of consecutive shifts	Y	M
F01.012	to trigger notification/alert when rules around a staff members working pattern/hours are about to be breached	Y	M
F01.013	to be able to assign a shift to a staff member who does not have an incident role, briefly stipulating their responsibility/task for the shift	N	S
F01.014	to present information about staff members that summarises their capability against various incident roles using a pre-defined list of standard values. This information used for this is mastered in another of the Provider's systems, and so the supplier's system will need to be refreshed from this.	Y	M
F01.015	to maintain and present detailed information about staff experience against various incident roles which includes following Experience data:	Y	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
	<ul style="list-style-type: none"> <li>- Number of incident shifts completed</li> <li>- Number of duty shifts/standby weeks completed</li> </ul>		
F01.016	to dynamically update staff availability based on their allocation to shifts on rosters. This means only presenting the rosterer with staff who are available and not already assigned to support the same incident in another role or other incidents from any areas. Similarly, staff will show as unavailable when they are already rostered for incident shifts immediately before or after the shift being rostered.	N	M
F01.017	To present a "homepage" screen which provides regularly refreshed views of notifications and outstanding actions relating to rostering and mutual aid which can be sorted and filtered based on urgency (time required) and priority (importance). The home screen presented will either relate to the user's local area with the ability to filter down to a specific incident, or in the case for those in the National Incident Room, will cover all areas and allow for this view to be filtered down to a specific area and/or incident.	Y	M
F01.018	for suitably authorised staff, such as those with an Administrator or Incident Administrator Persona, to update a staff members' rostering profile to stipulate that they should be rostered (in general or for a specific role) with a shadow. The effect of rostering a someone who needs a shadow is to add a requirement for an extra resource for the role being rostered.	Y	M
F01.019	for suitably authorised staff, such as those with an Administrator or Incident Administrator Persona, to be able to make a record of any shift completed by another member staff.	Y	S
<b>Create New Roster</b>			
F02.001	for suitably authorised staff, such as those with an Administrator or Incident Administrator Persona, to be able to create a new roster based on a template or from scratch defining the roster attributes in terms of name, type of roster.	Y	M
F02.002	to be able to set a Duty or Incident roster status to reflect which stage it is at, including, but not limited to "Draft" and "Published". Configurable business rules around what can be edited and what status changes are acceptable will need to be catered for e.g., "Published Rosters cannot be changed back to Draft" or "A Published Roster can be edited".	Y	M
F02.003	to publish one rostered Incident role at a time into a Duty Roster. (e.g., finished rostering role type A on standby and want this to be published, whilst still working on the roster for role type B.)	Y	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F02.004	to be able to publish Incident rosters with all rostered roles at once	N	M
F02.005	to modify the layout of the roster in terms of shift patterns to suit different types of duty, standby and incident rosters.	Y	M
F02.006	for suitably authorised staff, such as those with an Administrator or Incident Administrator Persona, to be able to create and maintain standard incident and duty roster templates that can be used to as the basis for building new rosters in a nationally consistent way.	Y	M
F02.007	to be able link all rosters created for a particular incident to link back to that incident and for the name of this incident to be selectable from a list which is maintained in line with the Environment Agency's standard Incident Name. If there is no suitable incident to link the record to then this will need creating.	N	S
F02.008	create and maintain a standard reference data set of incident types to be used across the supplier's solution for consistency.	N	M
F02.009	be able to select standard incident contact numbers (known as "Follow Me" numbers) from a list and assign it at a role level in a roster or Mutual Aid request	N	M
F02.010	to provide dynamic context sensitive roster help content to help ensure relevant roles are identified when creating a roster for an incident and to be able to configure this to improve this based on experience.	Y	M
F02.011	for context sensitive help to be readily available to assist the user when using the tool.	Y	M
F02.012	for suitably authorised users, such as those with a System Owner (Business) Personas to be able to configure and amend user help prompts.	Y	M
F02.013	to allow for supplementary notes to be added against roles on a roster to better inform rosterers - particularly less experienced ones - of incident specific information not covered in the standard role definitions.	Y	S
F02.014	to run multiple rosters concurrently for different incidents in one or more Areas.	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F02.015	to allocate under-utilised staff to more than 1 rostered role and across 2 consecutive shifts (or part-shifts) that total utilisation of the member of staff across the rostered roles is no more than 100% and Health, Safety and Wellbeing rules regarding hours worked and travel are not breached.	Y	S
F02.016	to be able to add the same role onto a roster multiple times and be able to indicate which instance is the main duty role, which is 1st, 2nd, or 3rd standby, as well as who is lead, backup/support or shadow so it is clear who has been assigned to each role.	Y	M
F02.017	to specify whether or not a role can be covered remotely and for this to be considered during rostering.	N	M
F02.018	to publish the roster and make it available in near real time so that they can always see an up-to-date copy. This is to allow incident staff to see not only their own shifts, but who they are working with, taking over from, and handing over to.	N	M
F02.019	to integrate with a unified communications service offering suitable APIs to initiate personal and/or group contact with rostered staff by a variety of channels include SMS, Phone & Microsoft Teams, without needing the end user of the Supplier's system to rekey this data into another system.	Y	M
F02.020	to be able to view a list of all rostered and standby incident staff by any combination of geographical area, incident, role or shift with the option to contact all or some of those listed	Y	S
<b>Obtain Staff Availability/Preference</b>			
F03.001	to trigger notifications/alerts requesting staff to provide or update their availability	Y	M
F03.002	for rosterers to set up and maintain automated and periodic reminders for staff to update their availability.	N	C
F03.003	to include a summary of expectations related to the roles and shifts when requesting staff to update their availability and for this text to be editable by the rosterers.	N	M
F03.004	for a rosterer to view the availability of specific staff member or members across a roster to help fill gaps and/or ensure suitable downtime	Y	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F03.005	for rostered staff to be able to easily update their availability for single/multiple shifts, including via a self-service portal/mobile app, so that this information is more likely to be maintained in an accurate state.	Y	M
F03.006	to display staff availability in a diary/calendar style view that would be similar to that used in Microsoft Outlook that is widely used and very familiar to the Environment Agency's staff.	Y	S
F03.007	to hold and maintain information on staff member's standard working patterns (days/hours) and allow staff and roster administrators to make temporary overrides for changing circumstances.	Y	S
F03.008	to clearly display to both staff and rosterers when staff are available and unavailable to be rostered, and to apply business rules to infer and show unavailability for any shifts not marked as available once the rostered staff member has confirmed their availability.	Y	S
F03.009	to allow staff to add further information about their availability preferences and constraints.	Y	S
<b>Assign Staff to Roster</b>			
F04.001	for rosterers to be made aware of staff preferences and extra information they may have entered so that it can be considered when rostering.	Y	S
F04.002	for the roster to clearly display the status of each shift. The list of status values being configurable in line with the Buyer's business terms.	Y	M
F04.003	to be able to set an Incident roster status to reflect which stage it is at, including, but not limited to "Draft", "On Hold" and "Live" and any intermediate stages reflecting interim approval stages. Note configurable business rules around what status changes are acceptable will need to be catered for e.g., "Live" Rosters cannot be changed back to Draft".	N	M
F04.004	for the information about who made changes to the roster and change of assignment status to be readily available for other users to see.	Y	M
F04.005	for more than one person to be able to edit the same roster concurrently, highlighting any conflicts that may arise before committing any changes.	Y	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F04.006	for National and Area rosterers to view and assign staff who are not in the same Area as the incident/duty being rostered for.	N	M
F04.007	for National and Area rosterers to be able to identify candidate staff who are suited to the role which is relevant to a shift, along with other criteria such as location and availability	N	M
F04.008	to trigger notification/alert when a staff member has exceeded more than 12 incident shifts within a 14 day period, (noting the number of shifts and period duration are to be configurable).	N	M
F04.009	to trigger notification/alert when a staff member is rostered for less than the minimum mandatory 11 hour rest period staff are allowed between incident shifts (noting the period duration is to be configurable).	N	M
F04.010	to trigger notification/alert when a staff member is rostered for more than the recommended 8 hours per shift, (noting the shift duration is to be configurable).	N	M
<b>Share, Confirm &amp; swap roster shifts</b>			
F05.001	to trigger notification/alert to staff of the proposed duty/shifts they will be assigned ahead of a roster being published.	N	M
F05.002	to record when contact has been made with a member of staff and the outcome of this contact so that other rosterers are easily able to see this to avoid contacting the same staff unnecessarily.	Y	M
F05.003	to publish a roster and for all the staff on that roster to be sent an offline copy and a link to view it on-line.	Y	M
F05.004	to allow staff assigned to the standby/duty rosters to swap their duty with another suitable staff member via a self-service portal/mobile app that can be accessed via a mobile device.	Y	M
F05.005	that enables staff to view the roster and their assigned shifts via both self-service portal/mobile app and a web app in a format that is easily understood so that staff can easily check the roster and information they need for their incident roles & assignments.	Y	M
F05.006	to trigger notification/alert to notify staff of any changes to rosters they are allocated to	Y	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F05.007	to see how many shift swaps have been instigated in any given period, overall and for each member of staff.	Y	M
F05.008	to trigger notification/alert to staff of their next shift handover date and time	N	S
<b>Modify Roster</b>			
F06.001	for suitably authorised staff, such as those with an Administrator or Incident Administrator Persona, to be able to amend all aspects of the roster and individual staff assignments after the roster has been published.	Y	M
F06.002	for suitably authorised staff, such as those with an Administrator or Incident Administrator Persona, to have a simple way to transfer existing assigned standby duties into shift patterns at the start of an incident and notify the duty officers of the shifts they have been assigned to.	N	S
F06.003	for suitably authorised staff, such as those with an Administrator or Incident Administrator Persona, to put some roles on a duty/standby roster on hold during an incident which will effectively make the assigned staff available for the new incident roster.	N	S
F06.004	for suitably authorised staff, such as those with an Administrator or Incident Administrator Persona, to be able to update the availability of staff for a specified data range. e.g., For those staff on long term sick.	Y	M
F06.005	to configure number of roles or people that shall be automatically notified if the roster for an Area is updated	N	M
<b>Raise Staff Mutual Aid Requests</b>			
F07.001	for an Area to raise a "staff Mutual Aid" request which specifies those roles and shifts that need to be filled from out of Area in a way that is efficient and provides a clear view of the roles and shifts required.	N	M
F07.002	for a user assigned to one Area to be able to view other Area's incident rosters (without editing rights)	N	M
F07.003	for the Requesting Area to specify which donor Area and/or person the request is targeted at, to cover the situation when resource is already known to be available in that Area.	N	M



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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F07.004	to include further details/notes of what will be required in the roles & shifts for a staff Mutual Aid request. This could include specific local geographic and system knowledge.	N	M
F07.005	to raise a general staff Mutual Aid request for roles without specifying particular dates/shifts, in the situation when the Requesting Area is interested to finding staff with the right skills to help fill the roster.	N	S
F07.006	for a staff Mutual Aid request to stipulate whether the role can be carried out remotely.	N	S
F07.007	to raise a request for a role or person with a specific skill that isn't on a roster such as a pump specialist, entering and viewing the dates & shifts that need to be covered in the same calendar format that is used for other rostered shifts.	N	S
F07.008	to request for a whole cell e.g., a Logistics Cell, to be resourced together.	N	M
F07.009	to trigger notification/alert when a new staff Mutual Aid request is submitted	N	M
F07.010	to trigger notification/alert when a Mutual Aid assignment has been confirmed	N	M
F07.011	to trigger notification/alert when Areas have provided responses sent to inform that they have Availability for the required role/shift	N	M
F07.012	to trigger notification/alert when an Area submits a new staff Mutual Aid request to prompt other Areas to look at the Area's Incident roster and Mutual Aid requirements	N	M
<b>National Oversight &amp; Control</b>			
F08.001	to provide a reporting dashboard that enables National Incident management oversight of the level of alert and resource resilience across all Areas in the country. This will need to include information on all staff availability for Mutual Aid so that National Incident Management can plan how best to direct resources from a national perspective during periods of high demand.	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F08.002	to allow authorised staff, such as those with an Administrator or Incident Administrator Persona, to be able to set the level of alert and resource resilience across their geographic Areas. This will need to include summary information on all staff availability for Mutual Aid	N	S
F08.003	for suitably authorised users in National Incident Room, such as those with an Incident Administrator Persona, to be able to control which Areas can see and respond directly to staff Mutual Aid requests to ensure that the highest priority incidents are resourced first.	N	S
F08.004	to handle a high number of requests by automatically sorting and filtering Mutual Aid requests and offers using pre-configured rules which match the requests with available resource, nearest travel time, adjacent Areas or where there are buddy arrangements in place. ( <i>"Buddy" arrangements are where staff with similar skills in different Areas are linked to quickly help ID Mutual Aid candidates</i> )	N	S
F08.005	for authorised Area staff, such as those with an Administrator or Incident Administrator Persona, to flag that all their staff or specific roles aren't available for Mutual Aid so Area and National requests can be directed and responded to by other Areas.	N	S
F08.006	to trigger notification/alert to Areas with lower levels of alert to ask their staff to update their availability for Mutual Aid	N	S
<b>Agree Staff Mutual Aid</b>			
F09.001	for suitably authorised staff, such as those with an Incident Administrator Persona, to be able to share incoming Mutual Aid requests with staff with the required roles so that they can see all of the details of the request themselves online and can also if the shift has already been fulfilled before responding.	N	S
F09.002	to have the option to automatically target Mutual Aid requests to a subset of staff in the Donating Area based on their availability for Mutual Aid and suitability. This to work alongside logistics officer led identification of potential staff.	N	S
F09.003	for suitably authorised staff, such as those with a System Owner (Business) Persona, to configure the system to exclude some Areas, with low resilience, from being sent staff Mutual Aid requests. This to also include the ability to reverse this exclusion if resilience improves.	N	S

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F09.004	the option for a staff member receiving a Mutual Aid request to be able to respond directly to the Requesting Area and offer to work on a particular shift or make a general offer to assist without the need for further National approval or Area review.	N	S
F09.005	for a staff member to make an offer via a self-serve option in a portal and also via self-service portal/mobile app	N	M
F09.006	for the logistics cell in a donor Area to be able to view staff offers and if they approve, then forward offers to the Requesting Area (if dealing direct).	N	S
F09.007	for the Requesting Area's logistics officers to be able to view staff availability of staff associated with approved Mutual Aid offers so that they can use this to directly confirm shifts with the member of staff without having to re-confirm this with the donor Area.	N	S
F09.008	for donor Areas and staff to make part offers for roles/shifts and when these are accepted for unfilled portion of the request retained as an open request showing the shifts that have been offered (but not yet confirmed by the Requesting Area) and those that are still outstanding.	N	M
F09.009	to trigger notification/alert directly informing that the Donating Area's offer of Availability has been matched with the Mutual Aid staff request	N	S
F09.010	to trigger notification/alert informing Donating Area of Health, Safety and Wellbeing (accommodation & local contact details) and requesting them to update the system with their staff Mutual Aid Logistics details	N	S
F09.011	for the staff whose Mutual Aid offers are accepted to be able view details of the assignment and confirm via self-service portal/mobile app	N	S
F09.012	to immediately reflect accepted Mutual Aid assignments on the roster so that shifts show as confirmed and the corresponding changes are made to the staff availability.	N	S
F09.013	to automatically generate confirmed Mutual Aid assignments and associated travel time as entries in the staff member's outlook calendar.	N	S

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F09.014	to automatically inform the Donor, Donor Area Logistics officers and staff member's line manager when someone is confirmed on a Mutual Aid assignment. Noting that staff members contact preferences may specify email, SMS notification, Microsoft Teams notification or a telephone message.	N	S
F09.015	for any confirmed Mutual Aid assignments to be reflected in the roster, and any rostering or Mutual Aid reporting dashboards, so that there is full visibility of these assignments, and it is obvious that a shift has been satisfied via Mutual Aid route with someone from outside the Incident Area.	N	M
F09.016	for suitably authorised staff, such as those with an Incident Administrator Persona in Areas receiving a Mutual Aid request to record a suitable response status that can be seen by the requester and reported on.	N	S
F09.017	For suitably authorised staff, such as those with an Incident Administrator Persona in Areas receiving a Mutual Aid request to provide information about availability of any suitable staff and for this to be visible to the Requesting Area logistics team as well as national incident room staff.	N	M
<b>Make Arrangements for Staff Mutual Aid</b>			
F10.001	to make travel details and Mutual Aid assignment details available to both the Donating and Requesting Area logistics officers to view and edit.	N	M
F10.002	to trigger notification/alert to request staff to enter details of their travel and requirements for hotel directly via the online account.	N	M
F10.003	to trigger notification/alert informing of the Mutual Aid staff travel and requirements for hotel	N	M
F10.004	to trigger notification/alert to specified staff in the National Incident Room, Requesting and Donating Areas once staff on Mutual Aid has confirmed their return to their base location by stated return date and for this to be viewable on the dashboards	N	M
F10.005	to trigger notification/alert to be sent to specified staff in the National Incident Room, Requesting and Donating Areas if staff on Mutual Aid has not confirmed their return to their base location by stated return date	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F10.006	to identify any shifts that have become the subject of a Mutual Aid request so that the request, any offers, and any eventual Mutual Aid assignment details can be accessed directly from the shift.	N	M
F10.007	for staff members to be able to view their Mutual Aid Assignments & Shifts via their profile on both a standard browser and a self-service portal/mobile app.	N	M
F10.008	for the Requesting Area to capture and save assignment specific information that the staff member will need for the assignment. This will include travel and accommodation details, including costs and associated cost codes that are associated with an accepted Mutual Aid assignment.	N	M
F10.009	for the assigned staff member to enter details of their intended travel plans for both outward and return journey along with other information that may have been requested by the Requesting Area.	N	M
F10.010	to tune the assignment data entry details based on whether or not the assignment allows for remote working (i.e., not on site in Requesting Area), in which case travel and accommodation information is not relevant.	N	M
<b>Record Staff Mutual Status</b>			
F11.001	to be able to update the status relating to a Mutual Aid for Staff request as it progresses through its lifecycle. The system to allow for a predefined set of status values which are configurable.	N	M
F11.002	to allow for availability for Mutual Aid to be treated separately from availability for supporting an incident within the local Area, and for this list to allow for certain pre-defined incident types to be explicitly included or excluded.	N	M
F11.003	for the Mutual Aid status of staff within an Area to be easily generated and accessed.	N	M
<b>Modify Staff Mutual Aid Requests</b>			
F12.001	for suitably authorised staff, such as those with an Incident Administrator Persona to update the Mutual Aid request and associated rostered assignment(s) at any time, changes will include extending or shortening the dates and changing role. These changes should be easily identified by staff already engaged with the amended Mutual Aid request, with appropriate authorisation in place to do so.	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F12.002	to automatically adjust Mutual Aid assignment status in response to other changes to the assignment or shift such as a change of date or role, or approval/rejection of an assignment that is pending approval.	N	M
F12.003	for suitably authorised staff, such as those with an Incident Administrator Persona, to cancel the Mutual Aid request/assignment prior to the assignment starting, subject to warnings. A note shall be added to record why the request is being cancelled. The cancelled request will still be available to report on but will not show as being assigned. This may or may not linked to removing a role/shift from a roster.	N	M
F12.004	for suitably authorised staff, such as those with an Incident Administrator Persona, to be able to re-open a Mutual Aid request that has been cancelled.	N	S
F12.005	to trigger notification/alert when there are any changes to, or cancellation of the assignment.	N	M
F12.006	to trigger notification/alert when a staff member's Mutual Aid status changes	N	M
F12.007	to log all changes to Mutual Aid requests with a comment, the user who made the change and the data/time the change was saved.	N	M
<b>MS O365 Integration</b>			
F22.001	to notify the rosterer of absences recorded in a staff member's Outlook Calendar	Y	M
F22.002	for a member of staff's line manager to receive a calendar notification informing them of the shifts that their staff have been assigned to.	Y	M
F22.003	for staff in Duty Officer roles to be able to accept shifts via Outlook and for this to be recorded into the Employee Rostering system	Y	M
F22.004	for a member of staff to receive a calendar notification of their duty schedule	Y	M
<b>Equality, Diversity &amp; Inclusion (EDI)</b>			

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F23.001	to record information on shift allocations that can be cross referenced with other Human Resources data to enable Defra to demonstrate adherence to Equality, Diversity, and Inclusivity Standards. (This will be enabled by such capabilities as being able to specify that a role can be done remotely or handled on a split shift basis)	Y	M
F23.002	to flag any situations where rosters result in Health, Safety and Wellbeing constraints being exceeded or at risk of being exceeded so that this can be considered when rostering and also reported on after the event where a decision to ignore the warning has been taken along with any recorded justification.	Y	M

## Annex B – Asset Related Functional Requirements

ID	The Supplier's solution shall provide the capability to	R1?	M/S
<b>Maintain Asset Data</b>			
F13.001	to maintain easily and readily all in scope Asset data in order to keep Asset data accurate and up to date. The data should be made readily available and accessible.	N	M
F13.002	to provide accurate and up to date information about all equipment assets that are in scope for Mutual Aid, regardless of whether the information is mastered within the Supplier's system or is obtained from another of the Buyer's applications; accepting that this information can only be as accurate as that provided to the Supplier by the Buyer's application.	N	M
F13.003	to be able to add and update asset information into the Supplier's system to ensure the information used for Mutual Aid is accurate. This is needed both for asset classes that are mastered in the Supplier's system and those which have been obtained from the Buyer's other systems, most notably the Tranman Fleet Management system.	N	M
F13.004	to provide supplementary information detailing standard auxiliary equipment that should be deployed with the asset type requested, so that this information is visible and easily referenced in any Mutual Aid requests.	N	M
F13.005	to be able to set and amend an asset status from a predefined list of allowable values and for this change to be automatically reflected so that it is visible to any other user involved in identifying assets needed to fulfil an asset request.	N	M
F13.006	to be able to update the availability status of an individual asset for a given date range using calendar user interface controls which allow for changes to be entered directly onto a calendar display as well as in linked date data entry controls. This will allow asset owners to programme in future unavailability of an asset e.g., 'removed for servicing'.	N	M
F13.007	for suitably authorised staff, such as those with a System Owner (Business) Persona, to be able to create new Asset Types along with the associated metadata e.g., "Asset Type=Pumps. Size=6inch", which will be used when setting up a Mutual Aid request. This provides for a consistent way of categorising assets for Mutual Aid, which can be applied during data entry and or data import/enrichment from the Buyers' systems.	N	M



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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F13.008	to be able to create and set unit quantity that can be ordered for certain disposable/consumable asset types. e.g., filled Sandbags are ordered in units of 100 and for the stock levels of these assets to be adjusted based on the Mutual Aid request status.	N	M
F13.009	ensure that search results do not include any discontinued asset types.	N	M
F13.010	to edit the status of assets directly from a search results list.	N	M
<b>Raise Asset Request</b>			
F14.001	to easily raise Asset request to meet the needs of Incident Response. There should be features to help Users select right asset(s) and auxiliary equipment.	N	M
F14.002	to be able to create a MA Asset Request for managed assets detailing the below, that will prompt the NIR (or Donating Area) to review the MA Asset Request: <ul style="list-style-type: none"> <li>· Incident name</li> <li>· Incident Type</li> <li>· Name of asset requested</li> <li>· Quantity</li> <li>· Dates Required</li> <li>· Area that requires asset</li> <li>· Contact information</li> <li>· Answers to predetermined questions for additional information required i.e. intended use</li> </ul>	N	M
F14.003	to be able to create a MA Asset Request for consumables/disposable items (e.g., sandbags/helibags) that will detail the below: <ul style="list-style-type: none"> <li>· Incident name</li> </ul>	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
	<ul style="list-style-type: none"> <li>- Incident Type</li> <li>- Name of Asset requested</li> <li>- Quantity (units of 100)</li> <li>- Dates required by (excluding a date for asset to be returned)</li> <li>- Area that requires asset</li> <li>- Incident Name /Type</li> <li>- Additional information provided regarding asset request (predetermined questions)</li> </ul>		
F14.004	to track usage of consumables, such as sandbags and helibags and identify where these have been disposed of so that asset usage levels are accurately maintained.	N	M
F14.005	view asset status and availability in a calendar view so it is easy for the user to see when an asset will become available in the future.	N	M
F14.006	to set pre-defined configurable questions which vary by asset type/size to better help the National Incident Room and responding Areas to understand the purpose of the request and identify the most suitable asset to offer to fulfil the request. These are to be maintainable by suitably authorised users, such as those with a System Owner (Business) Persona.	N	M
F14.007	present a list of predefined asset types to choose from and for there to be a simple way of displaying the corresponding metadata for each asset type.	N	M
F14.008	set a default asset required date which is configurable and overwritable, but which starts at 48 hours from date that the asset request was raised. Where the date is overwritten to a period less than 48 hours then the requests should be flagged as urgent and reflected via the user interface and any automated request notifications.	N	M
F14.009	automatically remind the user that urgent requests incur additional charges so that the requestor has the option to amend the time required to 48 hours or more in the future and stop the request being marked as urgent.	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F14.010	to prompt the user to state whether or not the person delivering the asset needs to have a Mutual Aid staff assignment created so that all relevant Health Safety & Welfare information is captured, even though they may not be assigned to an incident shift.	N	M
F14.011	link the Mutual Aid Asset request to the staff member delivering the asset, without needing to add them to a specific shift on the incident roster.	N	M
F14.012	to trigger notification/alert when a new Asset Mutual Aid request is submitted	N	M
F14.013	to select the destination for a Mutual Aid Asset Request which either by the National Incident Room or a specific Donating Areas so that the request is appropriately targeted.	N	M
<b>National Oversight &amp; Control</b>			
F15.001	to allow flexibility for National to fulfill Mutual Aid Asset request (via National or hire Assets), and share Asset requests with Areas	N	M
F15.002	to be able to indicate that hired equipment will be used to fulfil a Mutual Aid request instead of allocating an Environment Agency owned asset.	N	M
F15.003	to be able to share asset requests with other Environment Agency Areas at times of high incident alerts when it might be difficult to satisfy requests from local Area stock.	N	M
<b>Agree Asset Loan</b>			
F16.001	to allow National or Requesting Areas to efficiently review Asset requests and allocate suitable Assets to the Mutual Aid Asset requests, and for Asset status to up-date/change accordingly through the whole process.	N	M
F16.002	to be able to review a request for consumables/disposable items (e.g., sandbags & helibags), and update the MA Asset Request with key logistics information which includes: <ul style="list-style-type: none"> <li>• Delivery Method</li> <li>• To accept delivery, Requesting Area needs:</li> </ul>	N	M

**Schedule 2 (Specification) Appendix 1**

ID	The Supplier's solution shall provide the capability to	R1?	M/S
	<ul style="list-style-type: none"> <li>• People Delivering equipment</li> <li>• Expected departure &amp; arrival times</li> </ul>		
F16.003	<p>to be able to review a MA Asset Request and update the request with details of the asset assigned, along with key logistics information which includes:</p> <ul style="list-style-type: none"> <li>• Details of Asset Assigned (i.e., name, asset number, Hired/EA asset)</li> <li>• Standard package of auxiliary equipment</li> <li>• Delivery Method</li> <li>• To accept delivery, Requesting Area needs:</li> <li>• People Delivering equipment</li> <li>• Expected departure &amp; arrival times</li> <li>• Contact Information</li> </ul>	N	M
F16.004	for a user to view available assets within their own Area that match inbound Mutual Aid asset requests and be able to allocate selected assets to the Mutual Aid Request.	N	M
F16.005	to automatically update the asset status to 'On Mutual Aid' when the start date/time of an allocated Mutual Aid Asset Request is triggered.	N	M
F16.006	to trigger notification/alert to a Donating Area Logistics cell when their offer has been accepted	N	M
F16.007	to trigger notification/alert to the depot manager and Donating Area Logistics cell when an Area asset is booked and its status changes to 'Reserved'	N	M
<b>Arrange Delivery &amp; Transport of Assets</b>			
F17.001	to accurately record and confirm delivery and return of Mutual Aid Assets whether hired or donated by another Area.	N	M
F17.002	to ensure that all relevant information that is needed to hire an asset is shared by using pro-forma templates which are pre-populated with request details to ensure that the hire company receive all the information they need for delivery of the right assets to the right place at the right time. This information needs to be easily extracted to be used in emails to hire companies - no automated integration with 3rd party hirer's systems is required at this stage.	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F17.003	For complex Mutual Aid requests, to provide an itemised checklist for Mutual Aid booking which can be attached to the asset (physically via a printout as well as electronically via the system) so that all relevant items and auxiliary equipment can be checked on delivery and return after the loan period.	N	M
F17.004	to be able to verify receipt of asset deliveries directly on a self-service portal/mobile app by indicating the asset and any associated checklist has been checked.	N	M
F17.005	for the status of any Mutual Aid asset to be updated automatically based on the results of the delivery receipt verification.	N	M
F17.006	to be able to verify asset returns directly on a self-service portal/mobile app by indicating the asset and any associated checklist has been returned to National Incident Room/Donating Area.	N	M
F17.007	to trigger notification/alert to be sent to specified staff in the Requesting and Donating Areas if the Asset has not been returned by its stated return date	N	M
F17.008	to trigger notification/alert to specified staff in the National Incident Room, Requesting and Donating Areas once staff on Mutual Aid has confirmed their return to their base location by stated return date	N	M
F17.009	to automatically flag an asset's status as "overdue" if it is not returned by the agreed date	N	M
F17.010	for both Requesting Area and Donating Area to edit details about asset logistical arrangements as soon as they are known without any constraints. Note this does not extend to amending staff member's personal data - any temporary contact information should be recorded against the Mutual Aid request and not persisted against staff personal details.	N	M
F17.011	to view and update all relevant information regarding Mutual Aid and Hire requests via the portal and any self-service portal/mobile app. This data includes, but is not limited to: <ul style="list-style-type: none"> <li>- Name of Asset type requested</li> <li>- Quantity</li> <li>- Dates required</li> <li>- Area that requires asset</li> <li>- Incident Name/Type</li> <li>- Standard package of auxiliary equipment required</li> <li>- Additional information provided regarding asset request (predetermined questions)</li> </ul>	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
	<ul style="list-style-type: none"> <li>- Delivery Method</li> <li>- People Delivering equipment</li> <li>- Expected departure &amp; Arrival times</li> <li>- Return arrangements</li> </ul>		
<b>Modify Request &amp; Asset Booking</b>			
F18.001	to efficiently and intuitively update open Mutual Aid Asset requests and bookings to reflect changes required for Area Incident response, and for the updates to be recorded in the system and Mutual Aid assignment information on the profile of staff member delivering the Asset as well as any approvers and identified donors.	N	M
F18.002	for authorised staff to update the Mutual Aid Request and associated details for staff delivering the assets (i.e., staff profiles) at any time, changes will include extending or shortening the dates. These changes should be easily identified by staff already engaged with the amended Mutual Aid Request, with appropriate authorisation in place to do so.		
F18.003	to be able to cancel a Mutual Aid Asset Request if it is no longer needed or if it can't be fulfilled such as when the asset would be obtained by hiring.	N	M
F18.004	for the status of any asset removed from a booking to revert back to being available.	N	M
F18.005	to support transfer of an asset to another Area/location at the end of the booking without being constrained to having to return it to its original base location.	N	M
F18.006	for potential Donating Areas/National Incident Room to be able to update the request to say that the request cannot be satisfied and for this result in a notification to the requester so they can amend the request.	N	M
F18.007	for suitably authorised staff, such as those with an Incident Administrator Persona, to be able to record date/time stamped notes to explain any changes made to a Mutual Aid asset request.	N	M
F18.008	for all staff viewing a Mutual Aid request to be aware of the Mutual Aid status. The lifecycle statuses which are proposed are as follows, but these stages need to be easily configured to reflect any future changes to business processes. <ul style="list-style-type: none"> <li>- Asset request submitted</li> <li>- Asset allocated by National Incident Room /Donating Area</li> <li>- Logistics details required: Delivery, contact etc.</li> </ul>	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
	<ul style="list-style-type: none"><li>- Asset dispatched</li><li>- Confirmed Arrival (Asset status: On Mutual Aid)</li><li>- Asset dispatched for return (Asset status: On Mutual Aid)</li><li>- Repatriated (Available)</li></ul>		

## Annex C – Dashboards &amp; Reports

ID	The Supplier's solution shall provide the capability to	R1?	M/S
<b>Views &amp; Reporting</b>			
F19.001	to create new dashboards/views and reports of rosters, staff and asset data that can be configured (by system owner) to meet the different Operational and Business Intelligence needs of the business	N	M
F19.002	to pull and compare current against historic data. From this produce customisable reports on trends and changes over specifiable time periods	N	M
F19.003	to provide standard display and reporting features such as sorting and filtering on relevant fields, ordering, sorting, grouping, totals, calculations and charts.	N	M
F19.004	to define who has permission to view dashboards & reports and configure their settings	N	M
F19.005	to provide dashboards that show live operational data and reports to support situational awareness & oversight	N	M
F19.006	to provide a report of all required actions per Mutual Aid assignment, all requests/offers from a particular Area and all arrival and departure times of staff members	N	M
F19.007	to produce reports and dashboard view of result of analysis of Availability and Resilience analysis rosters at an Area or National Incident Room level indicating current resilience and picture of resource demand against availability;	Y	M
F19.008	to create reports listing staff per role and their capabilities, those who have capability to support but require a shadow, and how many staff have volunteered (and for how many times) in the last 12 months	Y	M
F19.009	to create reports that provide a view of operational resilience in terms of how committed staff are, what staff availability is, when 12 hour shifts are being used and other indicators of resource stress such as use of contract staff and using untrained staff to fulfil roles.	N	M
F19.010	to create various reports to check compliance with Health, Safety and Wellbeing in Area level rostering	N	M



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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F19.011	to create various reports to flag situations where Health, Safety and Wellbeing constraints have been exceeded or is at risk of being exceeded	Y	M
F19.012	to create reports of list of Area/National Incident Room staff in each Incident role who are trained, capable to support and active, those who have capability to support, how many staff are in training for each role and trends over time (e.g., are numbers in role decreasing/increasing over a specified time period)	Y	M
F19.013	to create a report that provides a view of: - location and the following status of staff trained for each role Available, Unavailable, Deployed, Office, Home, On-leave	Y	M
F19.014	to produce reports/views of duty officers or incident staff that will be on duty next week in a particular Area with a link to their contact details.	Y	M
F19.015	to create report/view of unassigned duty or incident roles that should currently be on duty in a particular Area	Y	M
F19.016	to create a report/view of unassigned duty or incident roles that should be on duty for a specified time and in a particular Area.	Y	M
F19.017	to create a report of details of staff on duty on a particular day across all Area	Y	M
F19.018	to produce a report that provides a view of: - list of staff who have not filled out their availability for roster shifts - list of staff who have filled out and when they filled out their availability for roster shifts - for staff who filled out their availability for roster shifts, percentage of time they offered - number of shifts offered to staff who offered their availability	N	M
F19.019	to produce a report that provides a view of: - number and type of shift allocated per duty officer against number of shifts actually rostered to the duty officer	N	M
F19.020	to produce a report that provides a view of: - number of people resource needed for the escalated Incident - number of actual resource available over the course of the incident - number of response shifts filled - list of staff actively involved in response (so we can see if we are overly reliant on a small number of people)	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
	<ul style="list-style-type: none"> <li>- list of staff who worked excessive hours/shifts or did not take adequate rest periods (for local management purposes, who were they</li> <li>- number of resources who were moved between business units (Mutual Aid)</li> <li>- How many shifts versus number of people</li> </ul>		
F19.021	to produce a report that provides a view of: <ul style="list-style-type: none"> <li>- number of staff involved in an incident</li> <li>- number of staff in an incident that were from National Incident Room</li> <li>- number of staff in an incident that were Area</li> <li>- total number of shifts undertaken across all roles</li> </ul>	N	M
F19.022	to produce a report that provides a view of: <ul style="list-style-type: none"> <li>- total number of duty/standby and incident shifts each individual has completed over the last 12 months.</li> </ul>	Y	M
F19.023	to produce a report that provides a view of: <ul style="list-style-type: none"> <li>- total number of duty roles/shifts a particular person carried out over a particular period including the detail of when they were stood down from a shift.</li> </ul>	N	M
F19.024	to produce a report that provides a view of: <ul style="list-style-type: none"> <li>- list of all open requests, each showing the request status including those that need actioning (e.g., book hotel)</li> <li>- easily drill down requests needing action and access all required information in appropriate format</li> </ul>	N	M
F19.025	to produce a report that provides a view of: <ul style="list-style-type: none"> <li>- total number of requests that have been submitted by (a. an Area, b. all Areas)</li> <li>- total number of offers that have been made by (a. an Area, b. all Areas)</li> <li>- total number of requests that have been fulfilled by (a. an Area, b. all Areas)</li> <li>- how many requests are at each stage of the Mutual Aid process</li> <li>- list of Areas requesting, offering and fulfilling Mutual Aid (including when each of the requests was made, offered, and fulfilled)</li> </ul>	N	M
F19.026	to produce a report that provides a view of: <ul style="list-style-type: none"> <li>- list of staff on Mutual Aid due to arrive and their arrival time at the destination</li> <li>- number of staff currently on Mutual Aid</li> <li>- list of staff on Mutual Aid and their return time to their home business unit</li> </ul>	N	M
F19.027	to filter report by Date, Area, Reference number, Incident role or Asset type.	Y	M
F19.028	to produce a report that provides a view of the number of requests that were raised and were cancelled and reason code	N	M

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ID	The Supplier's solution shall provide the capability to	R1?	M/S
F19.029	to produce a report on Number of National Incident Room and Area assets on current deployment by type and location	N	M
F19.030	to produce a report that provides a view of: Number of National Incident Room and Area assets on current deployment by type and location		
F19.031	to produce a report on urgency of requests submitted e.g., within 12 or 24 hours	N	M
F19.032	to produce a report on duration of deployments and requested extensions	N	M
F19.033	to produce a report of how long it takes to fulfil requests; what assets were offered, and if delivery time was met	N	M
F19.034	to provide a dashboard view and report of all asset specialists, their contact numbers. capabilities, location, and availability information	N	M
F19.035	to produce report of Mutual Aid work completed by 3rd party suppliers to be used to be used to reconcile against the suppliers' invoice	N	M
F19.036	to ensure reports can be generated by incident and Area.	N	M

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### Annex D – Messages & Notifications

ID	The Supplier's solution shall provide the capability to	R1?	M/S
<b>Messages &amp; Notifications</b>			
F20.001	to configure which roles will receive the automated notifications or mobile messages that are sent out.	Y	M
F20.002	to trigger notification/alert to send a notification or mobile message to the duty officer on duty	Y	M
F20.003	to allow suitably authorised staff, such as those with a System Owner (Business) Persona, to create or amend, pre-set notification or message templates in the system	Y	M

### Annex E – Login & Permission

ID	The Supplier's solution shall provide the capability to	R1?	M/S
<b>Login &amp; Permissions</b>			
F21.001	the system to only allow authenticated and registered users access to the system with functionality restricted based mainly on their Persona, but also on their Incident Role and the Environment Agency Area they are assigned to - both as their default or home Area and also for the duration of the incident as a result of fulfilling any Mutual Aid requests.	Y	M
F21.002	to filter the view of personal data related to staff in line with GDPR obligations so that users' personal details are only visible to users with specific Personas for bona fide business purposes in line with set permissions. In practice this is likely to be limited to certain personal contact information, Health, Safety and Wellbeing information (personal medical/family circumstances) that is relevant to incident support for contact and Health, Safety and Wellbeing reasons.	Y	M

Annex F – Non Functional Requirements

ID	Category	Requirement
NFR.001	01.Reliability and Availability	The Supplier shall provide a level of service defined in Schedule 10 (Service Levels).
NFR.002	01.Reliability and Availability	Schedule 10 is the definitive specification of the required Service Levels and if other non-functional requirements in this Annex contradict rather than supplement with the content of Schedule 10, then Schedule 10 shall take precedence.
NFR.004	01.Reliability and Availability	The Supplier shall ensure that the Supplier's Solution can meet a Recovery Point Objective (RPO) of less than or equal to 2 hours following a system failure.
NFR.005	01.Reliability and Availability	The Supplier shall ensure that the Supplier's Solution can meet a Recovery Time Objective (RTO) of less than or equal to 6 hours following a system failure.
NFR.007	02.Recoverability	The Supplier's Solution shall enable both regular (e.g., hourly) and ad hoc creation and export of current Incident and Duty Roster data and an extract of Mutual Aid Requests & Offers relating to active incidents so they can be stored off-line, so they are available to support manual workarounds in the event of loss of access to the Suppliers' Solution. This information to be provided as a data file and in a human-readable format consistent with the way the information is presented via the Supplier's User Interface to aid comprehension. Any such information is to be clearly data/time-stamped so its currency can be readily understood.
NFR.008	02.Recoverability	The Supplier shall ensure that the Supplier's Solution will be technically resilient to multiple and cascading subsystem failures.
NFR.009	02.Recoverability	The Supplier's solution shall consider that it will be used by the Environment Agency fulfill their role as a Category 1 responder (ref: Civil Contingencies Act 2004) and ensure support and business continuity/disaster recovery arrangements reflect the need to provide an up-to-date view of incident-related rosters and active Mutual Aid Requests and Offers.

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ID	Category	Requirement
NFR.010	03.Volumes	The Supplier shall ensure that the Supplier's Solution is geographically resilient with multiple instances of the service hosted at multiple locations, within the UK to deliver a highly available service.
NFR.011	03.Volumes	The Supplier should provide evidence of management of the integrity of the service data, e.g., after a service outage.
NFR.013	04.Performance	The Supplier shall ensure that the Supplier Solution provides a geographically separated Disaster recovery site in accordance with Good Industry Practice and the requirements of Schedule 14 (Business Continuity and Disaster Recovery) to allow full recovery of the Services should the primary site fail, in order to meet the Performance Indicators.
NFR.015	04.Performance	The Supplier shall ensure that the Supplier's solution has storage capacity to hold future-dated (up to 18 months), current and historic rosters and mutual aid requests which will need to cater for a 7 year retention period.

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ID	Category	Requirement
NFR.016	04.Performance	<p>The Supplier shall ensure that the Supplier Solution provides adequate storage to accommodate the variable data described below. This is provided to give a sense of scale to assist the Supplier, the actual physical storage capacity required depends on the Supplier's solution and therefore not specified by the Buyer.</p> <p><b>Day 1</b></p> <ul style="list-style-type: none"> <li>- Current Live and Historic Duty Rosters covering the whole of England (16 Areas + National) with typically 15 to 30 roles per shift which look forwards for 18 months and contain historic data going back up to for 7 years. For historic data migrated from the Buyer's existing system it would be acceptable to provide another read only view of inactive historic duty rosters.</li> <li>- Standby &amp; Incident Rosters for about 100 incidents a year Nationally, with any one major incident potentially scheduling 200 staff covering multiple roles</li> <li>- Mutual Aid records (offers and requests) for Staff and Equipment for up to 20 concurrent live incidents, with around 100 requests per incident</li> <li>- Staff profile, capability &amp; availability data needed for rostering and mutual aid for 7000 staff</li> <li>- Mutual Aid request – typically no more than 500 at any one time.</li> </ul> <p><b>Thereafter</b></p> <ul style="list-style-type: none"> <li>- Year on Year growth with all data on rosters and mutual aid requests retained for at least 7 years with all data more recent than 3 years being immediately available immediately without relying on it being restored from archive.</li> </ul>
NFR.017	04.Performance	The Supplier shall ensure that any archived records can be retrieved within 24 hours.

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ID	Category	Requirement
NFR.018	04.Performance	<p>The Supplier shall ensure that the Supplier Solution provides an end-user experience in line with the following:</p> <ul style="list-style-type: none"> <li>- Target response time under 1 second</li> <li>- Acceptable upper limit is 3 seconds for 99% of transactions</li> </ul> <p>Feedback is essential during any delay for complex transactions which are expected to extend beyond 3 seconds, (e.g., those relying on external services or those retrieving multiple pages of results).</p> <p>The Buyer accepts that some delays may be attributable to the overheads imposed by the Buyer's network, and these would be offset from the above.</p> <p>The Buyer expects the Supplier to follow industry good practice inline with the Google RAIL guidelines contained in <a href="https://web.dev/rail/">https://web.dev/rail/</a>.</p>
NFR.019	04.Performance	The Supplier shall ensure that the Supplier Solution will load and render a typical webpage with a mix of static text, labels, data entry and display fields load in less than 2 seconds in 95% of cases
NFR.020	05.Data	When loading large amounts of data containing many rows the web page displays data progressively to allow the user to interact with the system whilst other data is loading
NFR.021	05.Data	All data interactions requiring reads, writes and updates must have results returned in 3 seconds or less in 95% of cases.
NFR.022	05.Data	The Supplier shall ensure that the Supplier Solution is scalable to a 50% increase in the current assumed level of users signed on to allow for any changes in usage by the Buyer during the full Term of the contract.
NFR.023	05.Data	The Supplier shall provide a solution that can be scaled by up to 100% without degradation in performance to accommodate use by other Defra Group ALBs (Arms Length Bodies) should they wish to move their incident rostering onto this platform at a future date. This is a technical requirement independent of any other commercial considerations around licensing or change management.



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ID	Category	Requirement
NFR.024	05.Data	The solution shall be capable of supporting up to 7,000 users, of all stakeholder types. 10% of the user base (700 people) could have an active session, with 30% of these (210 people) using the system within the same 10-minute period. The load on the system will peak during the winter, as flood-related incidents rise, with the potential for several regions all managing their local incidents in parallel with each other.
NFR.025	05.Data	The Supplier must confirm that system data will not be shared with any other party without prior approval and that only the minimum data will be shared to meet the approved needs.
NFR.027	05.Data	The Supplier shall ensure that personal data held in the Supplier's System is necessary and proportionate to the need to use it.
NFR.028	05.Data	The Supplier's Solution must conform to the Defra data retention policy and schedules and Defra's Archive and Disposal Requirements. (Ref LIT 59774 Defra Data and Information Retention Policy). Data that constitutes the system of record or its archive will be retained in line with the policy, data that is not considered part of the system of record or its archive will need to be retained in line with the requirements of the business process that is being supported.
NFR.029	05.Data	The Supplier shall ensure that the Supplier Solution stores the Buyer's data and information in persistent storage that allows for efficient retrieval to support data analysis.

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ID	Category	Requirement
NFR.030	05.Data	<p>The Supplier shall ensure that the migration of any data from the existing systems into the Supplier's Solution demonstrates that the criteria below are met meet the criteria listed below:</p> <ul style="list-style-type: none"> <li>- data is secure during the migration process</li> <li>- no data is corrupted or lost as part of any migration.</li> <li>- end to end data migration process can be executed within a 24-hour period</li> <li>- test assurance that the migration solution will scale to handle full data sets</li> <li>- full operational and compliance audit of the migration process with suitable checks and balances to show a complete data migration has occurred</li> <li>- the migration activity (data, validation scripts, data cleansing scripts and data transformation code) is archived along with a copy of the original data sets</li> <li>- the migration should meet all relevant law, regulations and standards surrounding handling of any personal data including the GDPR provisions.</li> <li>- the migration process is repeatable and that it is possible to revert to interim stages to fix errors and resume</li> <li>- Buyer's staff are involved in reviewing and signing off the test, trial and final migration</li> <li>- secure segregation of interim migration data safely disposed off once migration has completed and been signed off.</li> </ul>
NFR.032	05.Data	<p>The Supplier shall segregate any data sets held on their platform for the purposes of data migration and dispose of it securely once migration stage has completed and the system is live.</p>
NFR.033	05.Data	<p>The Supplier shall ensure that the Supplier's Solution is designed so it is possible to make changes such as adding new metadata attributes or values in lists, error messages or help information can be managed by an admin user without needing changes to executable code and a corresponding software release cycle. Examples of reference data items which are expected to change include Defra Organisations, incident types, incident roles and asset classes.</p>

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ID	Category	Requirement
NFR.034	06.Data	The Supplier shall ensure that the Supplier's Solution can segment and manage data within the solution at organisation level so that configuration changes can be localised, and views can be restricted based on the organisation.
NFR.035	06.Security	Schedule 16 is the definitive specification of the Security, in the event that non-functional requirements in this Annex contradict, rather than supplement content of Schedule 16, then Schedule 16 shall take precedence.
NFR.036	06.Security	The Supplier shall ensure that the Supplier's Solution has the capability to bulk upload new or updated Datasets such as reference data lists, with no additional cost and little or no Supplier support or the need for bespoke software.
NFR.039	06.Security	The Supplier shall log all access to the system by the Supplier and store this securely for an agreed period (of up to a year) should analysis of this information be required.
NFR.040	06.Security	The Supplier shall ensure that the Supplier Solution provides a service to record information against flagged data so that a full audit trail can be maintained of material changes. All records to include audit metadata which includes transaction type, record of the change, date/time and identification of the user who updated the system.
NFR.041	06.Security	The Supplier shall ensure that the Supplier Solution provides audit logs that are read only and capable of being ingested by Defra's Microsoft Sentinel tool ( <a href="https://docs.microsoft.com/en-us/azure/sentinel/data-connectors-reference">https://docs.microsoft.com/en-us/azure/sentinel/data-connectors-reference</a> ).
NFR.043	06.Security	The Supplier shall ensure that the Supplier Solution manages End User accounts for Internal Users (Active Directory) so that End Users have Single Sign-on functionality using their existing credentials and do not need to register for a separate identity management service or follow a separate User Registration process.
NFR.044	06.Security	The Supplier shall ensure that the Supplier Solution provides the capability to limit search capability to using End User role-based access permissions so that End Users can only search for the data they have access to.

## Schedule 2 (Specification) Appendix 1

ID	Category	Requirement
NFR.045	06.Security	The Supplier's Solution shall restrict access to authenticated users and enforce user role-based security permissions that results in authorised users only having access to content and functions that they are authorised to see and perform. No guest accounts are to be allowed in LiveEnvironments for either using or supporting the application.
NFR.046	06.Security	The Supplier's solution shall balance minimal administrative overhead with appropriate security controls for the access method deployed and the security level of the data handled.
NFR.047	06.Security	The Supplier's Solution shall support role-based user profiles, along with the functionality to create new, configure, and suspend, user access to the Supplier's Solution with the ability to reference the Buyer's Active Directory groups to apply access at a group-level.
NFR.048	06.Security	The Supplier's solution must not allow a user to elevate their privilege.
NFR.049	06.Security	The Supplier must provide details in the Security Management Plan on how the Supplier's solution will manage access control.
NFR.050	06.Security	No parts of the system can be hosted outside of the EU, and ideally should be hosted in the UK.
NFR.051	06.Security	The solution must encrypt all data at rest to FIPS 140-2 standards using a minimum of AES256 encryption
NFR.052	06.Security	The Supplier shall ensure that the Supplier Solution has the capability to use HTTPS URIs where specified, such as for administrative access and authentication, so that authentication and security is ensured.
NFR.053	06.Security	The Supplier must confirm that the service will be capable of encrypting data in transit and at rest at a level that is suitable for Personal and operational data which has a classification of OFFICIAL SENSITIVE. The Buyer's expectation is that solution ensures that data in transit is protected between Defra end user device(s) and the service using a minimum of TLS 1.2 or above, or an IPsec or TLS VPN gateway using with a pre-shared certificate from a Defra approved certificate authority.

## Schedule 2 (Specification) Appendix 1

ID	Category	Requirement
NFR.055	06.Security	The Supplier's Solution shall detect misuse of user account and provide a mechanism for account suspension and subsequent reset.
NFR.056	06.Security	The Supplier's Solution shall ensure that any personal or user data stored on a mobile device is secured.
NFR.057	06.Security	The Supplier must provide details on how the service is segregated from other customers so that the Buyer can determine whether the service is adequately protected.
NFR.058	06.Security	The Supplier's solution shall be accessible from any DEFRA UK office location and any Defra device accessing the Defra network via an approved route (e.g. via Defra approved VPN software installed on a Defra Group device).
NFR.059	06.Security	To set inactive timeouts so that sessions are automatically closed when the user has not performed any activity for a period of time. This period to be configurable.
NFR.060	06.Security	The Supplier shall ensure that the Supplier Solution complies with the security requirements set out in Schedule 16 (Security).
NFR.061	06.Security	The Supplier shall ensure that any external (to the Defra network) accessible end points of the Supplier's Solution pass external penetration test in accordance with the Buyer's IT Health Check criteria as set out in Schedule 16 (Security).
NFR.064	06.Security	The Supplier will share the findings of any Security testing of the Supplier's Solution with the Buyer and make it clear what controls and attack vectors were in scope for these tests.
NFR.068	06.Security	As per Schedule 16, which states that the Supplier must provide evidence of adherence to established Good Industry Practice, examples include security controls recommended by Open Web Application Security Project (OWASP), CESA (Communications-Electronics Security Group), National Institute of Standards & Technology (NIST) or other recognised security framework aligned to these.

## Schedule 2 (Specification) Appendix 1

ID	Category	Requirement
NFR.069	06.Security	The Supplier shall ensure that the Supplier's Solution ensures that zone and domain boundaries are protected and information flows across boundaries are monitored and logged
NFR.070	06.Security	The platform hosting the Supplier's solution is capable of being isolated from IP ranges and blocks, either by whitelisting and/or blacklisting.
NFR.071	06.Security	The Supplier shall ensure that any application should not transmit or share information about itself or usage back to the vendor without the Buyer's permission (e.g., location, usage info, version, error reporting)
NFR.072	06.Security	The Supplier must agree to, and provide support for, an IT Health Check of the service carried out by an independent 3rd party under the NCSC CHECK Scheme ( <a href="https://www.ncsc.gov.uk/information/check-penetration-testing">https://www.ncsc.gov.uk/information/check-penetration-testing</a> ) prior to go live and at agreed intervals throughout the life of the Service. Vulnerabilities discovered as part of this activity will be remediated in line with the Buyer's risk appetite. The latter can be provided on request.
NFR.073	06.Security	The Supplier must provide details of the vulnerability management process relating to the systems processing or hosting the Buyer's information as part of the supplier's service.
NFR.074	07.Service Management	The Supplier must identify all third parties involved in the supplier's service, detail the services they provide and provide evidence that they will meet the same security standards of the Supplier.
NFR.076	07.Service Management	The Supplier must provide evidence that equivalent Supplier Solutions for other customers are compliant with the Cloud Security Alliance STAR standards <a href="https://cloudsecurityalliance.org/star/">https://cloudsecurityalliance.org/star/</a> ) for self-assessment with results from most recent self-assessment to be provided to Defra.
NFR.079	07.Service Management	The Supplier shall ensure that they define the logging and monitoring process and allow for Business Activity Monitoring, Error logging and Security event notifications to be made available and accessible to the Buyer's own service monitoring (ServiceNow) and Security Operations Centre (SOC) monitoring tools (MS Sentinel).

## Schedule 2 (Specification) Appendix 1

ID	Category	Requirement
NFR.080	07.Service Management	The Supplier's solution shall monitor file transfers and ensure that there are appropriate real time acknowledgements of file receipt and successful processing.
NFR.082	07.Service Management	The Supplier shall ensure that the Supplier Solution enables the capture of usage information to support benefits realisation by being able to provide evidence of how the Solution is being used/
NFR.084	07.Service Management	The Supplier must provide evidence of monitoring for unusual activity and maintenance of records of events for future analysis and make available any logs and audit data relating to the service if required by the Buyer.
NFR.085	07.Service Management	The Supplier's solution shall provide the ability to create logs and alerts that can be consumed by the Buyer's service monitoring Security Information and Event Management (SIEM) and application monitoring solutions by providing monitoring information using documented non-proprietary protocols.
NFR.094	07.Service Management	The Supplier shall disclose to Defra the location off offshore support staff and whether these staff are able to work remotely.
NFR.099	08.Compatibility	The Supplier Solution shall be provided as a managed Software as a Service (SaaS) basis, with no dependency on the buyer to maintain the application or the hosting platform. The Buyer's involvement in providing support for changes to the application is limited to managing application configuration and reference data via pre-defined methods.
NFR.102	08.Compatibility	Supplier shall ensure that the Supplier Solution enables the standard user interface with all functionalities available to be accessed via a mobile device using a standard browser with scroll and zoom options enabled. This is so that functions not typically required by a mobile user can still be accessed from a mobile device as per guidance in Gov.UK Service Manual ( <a href="https://www.gov.uk/service-manual/technology/designing-for-different-browsers-and-devices">https://www.gov.uk/service-manual/technology/designing-for-different-browsers-and-devices</a> ).
NFR.103	08.Compatibility	The Supplier shall provide a mobile web application delivered that is dynamically rendered to handle a range of resolutions suited to the form factor of the mobile device. The Buyer's preference is to avoid any need to manage local installed mobile apps.

## Schedule 2 (Specification) Appendix 1

ID	Category	Requirement
NFR.104	08.Compatibility	The Supplier shall support access via a mobile device (smartphone/tablet). The mobile-specific user interface need not provide the full functionality of the main application, but as a minimum it must support use cases including viewing rosters, self-service acknowledgement of rostered shifts, swap requests and recording arrival on site for remote workers.
NFR.105	08.Compatibility	The Supplier's solution must allow for the use of mobile devices including the ability to issue alerts to and receive information back from personal devices such as mobile phones with due regard to security and HS&W constraints. This includes contacting staff via SMS, voice call or email to personal and work addresses provided by staff for purposes of incident management.
NFR.106	08.Compatibility	The Supplier's solution shall operate correctly and be compliant as per the GDS definition with the GDS list of supported browsers on the GDS listed browsers and platforms.
NFR.107	08.Compatibility	The Supplier shall ensure that the Supplier Solution is underpinned by a documented data model that is published for use by the buyer and can be used to assist with system integration by providing unambiguous definitions of all data items used in any APIs
NFR.108	08.Compatibility	The Supplier shall provide documentation describing change control & associated configuration management processes that define how the software and associated documentation is version managed and maintained so it remains accurate.
NFR.113	08.Compatibility	The Supplier shall ensure that the Supplier Solution allows for interfaces to external systems to be created, amended, and removed without operational impact on any other interface.
NFR.114	08.Compatibility	The Supplier shall ensure the Supplier Solution can import and export data/ information using either a push or pull mechanisms
NFR.116	08.Compatibility	The Supplier shall provide a means to export data to facilitate migration away from their Solution. Data lock-in is unacceptable and so the Supplier shall provide tight definitions of the data export formats.



**Schedule 2 (Specification) Appendix 1**

ID	Category	Requirement
NFR.117	08.Compatibility	The supplier shall provide documentation defining all interfaces with all data items and business terms defined in terms of data type, constraints and explanation to enable alignment to Defra's corporate data model.
NFR.118	08.Compatibility	The Supplier shall ensure that the Supplier Solution has the capability to Download all reports in csv format. Downloaded reports should reflect the filters that are applied so the reporting data that is required is more accessible.
NFR.119	08.Compatibility	The Supplier shall ensure that the Supplier Solution has provisions for legacy integration using mechanisms such as an adapter framework.
NFR.120	08.Compatibility	The Supplier shall ensure that the Supplier Solution exposes its main functions as services with supporting API definitions and make test harnesses available to facilitate integration.
NFR.122	09.Compliance	The Supplier shall ensure that any APIs provided as part of the Supplier Solution are based on RESTful or JSON conforming to API technical and data standards (v2 - 2019) - GOV.UK where relevant (in accordance with Schedule 2.3 (Standards)).

## Schedule 2 (Specification) Appendix 1

NFR.123	09.Compliance	<p>The Supplier shall ensure that the Supplier Solution uses APIs and data files provided from other Buyer's systems to provide information on data relating to staff, availability, and assets that are mastered in these other systems, but which is needed by the Supplier's solution.</p> <p>The Buyer will provide APIs and file layout specifications and sample data files/messages and access and supporting data modes and definitions so that the Supplier can readily understand this data and determine how to use it in their Solution.</p> <p>The Baseline information for the interfaces is as follows:</p> <ul style="list-style-type: none"> <li>a) Staff Capability Data Initially (Release 1) c. 30 data attributes provided via CSV extract file generated from PREP2 reporting system using underlying data held in Incident Management Academy (IMA) data and SOP (staff data). Frequency of update - weekly refresh. File can be made accessible via SFTP or HTTPS File Download based on Pull Request from Supplier.</li> <li>by Final Release – option of a RESTful API which can provide the same information available on demand for Final Release</li> <li>b) Tranman – Asset Data Initially c. 30 data attributes provided via CSV extract file or XML file generated from Tranman Fleet Management System. File can be made accessible via SFTP or HTTPS File Download based on Pull Request from Supplier.</li> <li>by Final Release – option of a RESTful API which can provide the same information available on demand for Final Release (this is dependent on planned upgrade to Tranman...</li> <li>c) Active Directory (AD) Name/Organisation/Contact Data Read access to Defra Azure AD information via standard Microsoft APIs</li> <li>d) SOP Staff Information c. 20 attributes</li> </ul>
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**Schedule 2 (Specification) Appendix 1**

ID	Category	Requirement
		<p>e) Read access to Files Extracted from SOP to supplement AD data. File can be made accessible via SFTP or HTTPS File Download based on Pull Request from Supplier.</p> <p>f) Staff Incident Role Data  Reference Data listing of Incident "Master" Roles – c.5-10 attributes  Staff allocation to Incident Roles c. 5-10  Initially provided via CSV extract file generated from PREP2 system. File can be made accessible via SFTP or HTTPS File Download based on Pull Request from Supplier.</p> <p>Looking to Master this data on LPT, so this may only be used for initial data load.</p> <p>g) Staff Training Records (Incident Related)  Information sourced from Incident Management Academy System &amp; Offline Spreadsheets. C 10 attributes per record</p> <p>Provided via CSV extract file generated by the Buyer.. File can be made accessible via SFTP or HTTPS File Download based on Pull Request from Supplier.</p> <p>h) MS Teams/ O365 Power Platform and Outlook for Unified Communications and Calendaring..  Expect to have two-way integration to be able to obtain and set user availability from Outlook Calendars, trigger email, and MS Teams notifications,</p>

## Schedule 2 (Specification) Appendix 1

ID	Category	Requirement
NFR.124	09.Compliance	The Supplier shall ensure the Supplier Solution is built on Software and Technology Platforms that are widely supported by Defra and other System Integrators to mitigate the risk of lock-in to niche technologies or 3 <sup>rd</sup> party suppliers.
NFR.125	09.Compliance	The Supplier shall provide a Supplier Solution that can be deployed as an HTML 5 compliant web application accessed via standard Web-based technologies without any code being permanently deployed on an end users' device.
NFR.126	09.Compliance	The Supplier shall ensure that the Supplier Solution's modules provide services that are described in such a way so they can be used by an (expert) third party, such as another Supplier.
NFR.127	09.Compliance	<p>The Supplier shall provide an End User Interface for the Supplier Solution to meet (or exceed) the following standards</p> <ul style="list-style-type: none"> <li>- Level AA of the Web Content Accessibility Guidelines (WCAG) 2.1 (W3C Recommendation June 2018) (in accordance with Schedule 2.3 (Standards)).</li> <li>- GDS standards and principles <a href="https://www.gov.uk/service-manual/helping-people-to-use-your-service/making-your-service-accessible-an-introduction">https://www.gov.uk/service-manual/helping-people-to-use-your-service/making-your-service-accessible-an-introduction</a></li> <li>- GDS standards and principles for Government (internal users) as outlined in <a href="https://www.gov.uk/service-manual/design/services-for-government-users#accessibility">https://www.gov.uk/service-manual/design/services-for-government-users#accessibility</a></li> </ul>
NFR.128	09.Compliance	The Supplier shall ensure that the Supplier Solution uses colour in presentation of information to support the End User in the processes of completing the required operational task, taking into account contrast and other factors which reduce accessibility for the visually impaired users such as those with colour blindness. This is linked to the more general accessibility requirement.
NFR.129	09.Compliance	The Supplier shall ensure that the Supplier Solution can support users from the Environment Agency, the wider Defra organisation and external third parties who have been granted secure access credentials by Defra for the purposes of incident support. Most users will be from within the Environment Agency.

## Schedule 2 (Specification) Appendix 1

ID	Category	Requirement
NFR.131	09.Compliance	The Supplier shall design the Supplier Solution and licensing regime to minimise the total ongoing running cost and carbon impact of the Supplier Solution and share any carbon calculations with the Buyer.
NFR.132	09.Compliance	The Supplier shall ensure that the Supplier Solution conforms to Government Digital Standards ( <a href="https://www.gov.uk/service-manual/service-standard">https://www.gov.uk/service-manual/service-standard</a> ) as they apply to applications intended for internal use.
NFR.133	09.Compliance	The Supplier shall confirm that data will only be stored and processed for its intended purpose and that the storage and processing will comply with relevant legislation.
NFR.135	09.Compliance	All system output must be marked in line with the Government Classification Scheme. Include page header and footer bars and appropriate message when printing or viewing document
NFR.136	09.Compliance	The Supplier shall hold and provide to the Buyer information on the in-force accreditations they hold for the underlying solution/technologies used by the Supplier Solution.
NFR.137	09.Compliance	The Supplier must demonstrate any sustainability certification and provide independent certificates for validation.
NFR.138	09.Compliance	The Supplier shall show a robust process is in place for ensuring that the licences for all software (system and application) and all assets used by the system are legal and up to date. This is to include a regular report on licence usage being provided to the Buyer.
NFR.139	09.Compliance	The Supplier must detail any international supply chains upon which the service is dependent, to include software, hardware and/or services. These cannot include any that are sanctioned or otherwise prohibited by the UK Government.
NFR.140	09.Compliance	The Supplier shall adhere to the compulsory open standards profiles that have been adopted for use in government for exchanging information as detailed in <a href="https://www.gov.uk/government/collections/open-standards-for-government-data-and-technology">https://www.gov.uk/government/collections/open-standards-for-government-data-and-technology</a>

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ID	Category	Requirement
NFR.141	09.Compliance	The Supplier shall ensure that the Supplier Solution is supplied as a cloud-hosted software service in line with the UK Government's Cloud First Policy ( <a href="https://www.gov.uk/government/publications/cloud-guide-for-the-public-sector/cloud-guide-for-the-public-sector#the-cloud-first-policy">https://www.gov.uk/government/publications/cloud-guide-for-the-public-sector/cloud-guide-for-the-public-sector#the-cloud-first-policy</a> ).
NFR.142	09.Compliance	The Supplier shall ensure that the underlying platform and software services (component applications, operating system, middleware, databases) are be maintained on a regular release cycle so they are maintained on fully supported versions in line with an "Evergreen" IT management approach.
NFR.143	09.Compliance	The Supplier shall ensure that the Supplier Solution has the capability to configure and provide reports through filters including User Role, Incident, Environment Agency Area and Data/Time ranges.
NFR.144	09.Compliance	The Suppliers Solution shall be capable of applying a common Defra Look & Feel based on a style sheet or similar mechanism, so changes are easily applied and modified in a way that does not affect the functionality or performance
NFR.145	09.Compliance	The Supplier shall ensure that the Supplier Solution provides consistent branding using standard Defra colour schemes and styles, so that end Users are made aware that it is an internal Defra Group application. Refer to <a href="https://github.com/DEFRA/design-standards">https://github.com/DEFRA/design-standards</a> .

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ID	Category	Requirement
NFR.146	09.Compliance	<p>The Supplier shall provide an End User Interface for the Supplier Solution to support the overall objectives for efficiency by providing an efficient experience for End Users to minimise the delays in performing tasks. This shall include as a minimum:</p> <ul style="list-style-type: none"><li>a) consideration of the number of clicks to carry out processes;</li><li>b) presentation of information as to be readily identifiable as to its relevance;</li><li>c) grouping of related functions to simplify processes;</li><li>d) pre-filling of screens as End Users progress through standard workflows;</li><li>e) use of auto-complete;</li><li>f) consistency.</li></ul>
NFR.147	09.Compliance	<p>The Supplier shall ensure that the Supplier Solution provides a notification on the End User Interface of any outage.</p>
NFR.148	09.Compliance	<p>The Supplier shall ensure that the Supplier Solution enables persistence of End User-settings between sessions. e.g., any end user-controlled preferences regarding defaults or layout are preserved.</p>
NFR.149	09.Compliance	<p>The Supplier shall provide an End User Interface for the Supplier Solution to support experienced End Users by providing quick entry input means.</p>
NFR.150	09.Compliance	<p>The Supplier shall ensure that the Supplier Solution facilitates ad-hoc reporting and data analysis to support common reporting queries for individuals, roles and incidents without forcing the user to separately access another external MI application. The reports this generated should be downloadable as CSV files, Excel and or PDF files.</p>

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ID	Category	Requirement
NFR.151	09.Compliance	The Supplier shall ensure that the Supplier Solution provides latency that is acceptable to End Users (defined as 90% within 1 second and 99% within 3 seconds). Where a longer response is outside control of the Supplier, then the user is kept informed as to progress and not left waiting on a response by locking their session until a transaction has completed. In these circumstances the preference is to be able to access the information when it becomes available and for there to be a notification or other indicator within the User Interface to say the response is available to retrieve. This links to the Performance requirements (NFR.018 to NFR.021)
NFR.152	09.Compliance	The Supplier shall ensure that the Supplier Solution provides the capability for rephrasing, autofill, and suggestions in end-user search term data entry.
NFR.153	09.Compliance	The Supplier shall ensure that the Supplier Solution provides the capability to filter the search results that are being displayed by selecting/deselecting various attribute values in the results display so that the search results are reduced to those that are of interest to End Users.
NFR.154	10. Maintainability	The Supplier shall ensure that the Supplier Solution a way of performing high volume tasks which avoids repetitive data entry.
NFR.155	10. Maintainability	The Supplier shall ensure that the Supplier Solution is configured to publish date and time information using the most appropriate units of time for the circumstances, consideration having been given to end user needs. All date/time formats are to default to 24 hours clock and take into account British Summer Time adjustments and standard UK convention based on Day - Month - Year order for data entry and display purposes.
NFR.156	10. Maintainability	The Supplier shall provide an End User Interface for the Supplier Solution to support the avoidance of erroneous input e.g. using data validation, on screen tips and context dependent Help being available.
NFR.157	10.Maintainability	The Supplier shall ensure that the Supplier Solution's validation errors are written in plain English so that errors can be easily understood to facilitate record correction.



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ID	Category	Requirement
NFR.158	10.Maintainability	The Supplier shall ensure that the Supplier Solution's provides an online help solution, with content that can be extended and modified by the Buyer's suitably authorised staff.
NFR.159	10.Maintainability	The Supplier shall ensure that the Supplier's Solution has a flexible and modular software architecture that facilitates extension, modification and integration.
NFR.160	10.Maintainability	The Supplier shall ensure that the Supplier's Solution modules provide services that impose low consumer coupling and that themselves are decoupled from its surrounding environment.
NFR.161	10.Maintainability	The Supplier shall provide a standard regression test pack with content agreed by the Buyer so that regression tests can be run to provide assurance for maintenance releases or other isolated changes.
NFR.162	10.Maintainability	The Supplier shall ensure that the Supplier's Solution provides text & image content, including on-line help, in a way that is configurable and maintained on a self-service basis by the Buyer's System Administrators, without needing Supplier input.
NFR.163	10.Maintainability	The Supplier shall ensure that the Supplier's Solution will be capable of 'rolling back' to a known working state should the introduction of an Upgrade, Update or New Release be found to be causing Service Incidents and Problems in the Live Environment.
NFR.164	01.Reliability and Availability	The Supplier shall ensure that the Supplier's Solution provides the capability to enable enhancement of components such as modifying existing business rule logic or amending reference data without negatively impacting on other components and interfaces.
NFR.165	01.Reliability and Availability	The Supplier shall provide a Supplier Solution that is architected to ensure separation of data and function with loosely coupled interfaces to aid integration and scaling.

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ID	Category	Requirement
NFR.166	01.Reliability and Availability	The Supplier shall ensure the Supplier Solution provides the capability to expand so that the Buyer can extend the use of the Solution to other Defra Group Arms Length Bodies (ALBs) to handle different types of incidents, for different members of staff. (The Buyer acknowledges that expansion to include other ALBs would be done via a Contract Change to take into account any licensing, support or configuration changes that were necessary).
NFR.167	01.Reliability and Availability	The Supplier shall ensure that the Supplier Solution provides the capability to enable re-usability of components. The Buyer expects this to be enabled via APIs that allow for other applications to call on Rostering and Mutual Aid services without enforcing use of the Supplier System's web user interface.
NFR.168	01.Reliability and Availability	The Supplier shall ensure that the Supplier Solution provides the capability to test, train, implement, operate and manage change or new services.

## Annex G – Personas

### 1. DEFINITIONS

- 1.1 In this Schedule, the following words shall have the following meanings and they shall supplement Schedule 1 (Definitions):

<b>"Incident Role"</b>	A specific role carried out by a member of EA staff during an incident, an alternative to their usual day job;
<b>"Persona"</b>	An overarching type of user group that may consist of more than one named incident/duty role and some day job roles/activities. Each Persona will require varying access permission levels and functional ability.
<b>"Day Job"</b>	The job a staff member was employed to do by the Environment Agency. Not a staff member's incident role (which is typically a voluntary role).

### 2. BUSINESS SYSTEM OWNER C.10 USERS

#### 2.1 Overview

- Governs the system use, access and functionality
- Oversees supplier contracts, configuration requirements and plans future enhancements.
- Supports and works closely with the super user community
- Permission Level: Owner

#### 2.2 Day job role type

- Business as usual team
- Technical support staff (Buyer & Supplier)

#### 2.3 Section Access: All, National and Areas

### 3. ADMINISTRATOR C.250 USERS

#### 3.1 Overview

- Creation of duty rosters
- Editor of core data for duty and incident staff which may include training and staff capability information
- Permission Level: Super user

#### 3.2 Day job role type

- Roster Administrator
- Local/National Role Delivery Leads

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- Asset Management Operations Team

3.3 Section Access: Geographical Area dependent

### 4. INCIDENT ADMINISTRATOR C.300 USERS

#### 4.1 Overview

- Populates and administers incident rosters (not duty rosters) and Coordinates mutual aid staff
- Manages equipment requests and coordinates mutual aid assets
- Permission level: Editor

#### 4.2 Incident response role types

- Logistics Officers
- Asset Management Operations Team/Responsible Officers
- Incident Support Officers
- Equipment & Materials Officers
- Field Operations Duty Officers
- Depot Staff

4.3 Section Access: Geographical Area dependent, will need to change during mutual aid assignments

### 5. ALL STAFF USER C.7000 USERS (AND ENHANCED ALL STAFF USER C.20)

#### 5.1 Overview

- Access to the self-service portal/mobile app to provide availability/unavailability
- View of their allocated duty weeks and rosters and incident/mutual aid shifts including any additional information provided

#### 5.2 Role Types

- Staff with incident/duty roles
- Incident Communications Staff as 'Enhanced all staff users'

5.3 Section Access: Geographical Area dependent

**6. REPRESENTATIVE HIGH LEVEL PERSONA ACCESS REQUIREMENTS**

HL REQUIREMENTS (NOT EXHAUSTIVE)	BUSINESS SYSTEM OWNER (Day job role)	ADMINISTRATOR (Day job role)		INCIDENT ADMINISTRATOR (Incident response roles)	ALL STAFF USER (Duty & Incident response role)	ENHANCED ALL STAFF USER (INFORMATION COMMUNICATION SERVICE)
		DUTY ADMINISTRATOR	ROSTER ADMINISTRATOR ASSET MANAGEMENT TEAM			
HL1. MAINTAIN STAFF AND ROSTER DATA	Y	Y		Y	Y	
HL2. CREATE NEW ROSTER	Y	Y		Y	Y	Y – VIEW ROSTERS & STAFF CONTACT DETAILS
HL3. OBTAIN STAFF AVAILABILITY / PREFERENCE	Y	Y		Y	Y	
HL4. ASSIGN STAFF TO ROSTER	Y	Y		Y		
HL5. SHARE, CONFIRM AND SWAP ROSTER SHIFTS	Y	Y		Y	Y	
HL6. MODIFY ROSTER	Y	Y		Y		
HL7. RAISE STAFF MUTUAL AID REQUESTS	Y			Y		
HL8. NATIONAL OVERSIGHT AND CONTROL	Y	Y		Y		
HL9. AGREE STAFF MUTUAL AID	Y			Y	Y	
HL10. MAKE ARRANGEMENTS FOR STAFF MUTUAL AID	Y			Y	Y	
HL11. RECORD STAFF MUTUAL AID STATUS	Y			Y	Y	
HL12. MODIFY STAFF MUTUAL AID REQUESTS	Y			Y	Y	
HL13. MAINTAIN ASSET DATA	Y		Y			
HL14. RAISE ASSET REQUEST	Y			Y		
HL15. NATIONAL OVERSIGHT & CONTROL	Y			Y		
HL16. AGREE ASSET LOAN	Y			Y		
HL17. ARRANGE DELIVERY & TRANSPORT OF ASSETS	Y			Y		
HL18. MODIFY REQUEST & ASSET BOOKING	Y			Y		

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### **Annex H – RFI**

At the end of January 2022, Defra issued a prospectus defining a Request for Information (RFI) for a Logistics Planning Tool for staff rostering and mutual aid.

Details can be found on

<https://www.contractsfinder.service.gov.uk/Notice/609b407f-0cf1-4a76-be0d-b6079e823cdc>

The period for responses has now ended, but the document provides some useful context and background.

This link is provided for information and does not form part of this contract.

## **Annex I – Standards Referenced**

### **1) General**

- a) Any changes to the Standards, including the adoption of any such new or emergent standard, shall be agreed in accordance with the Change Control Procedure
- b) Where a new or emergent standard is to be developed or introduced by the Buyer, the Supplier shall be responsible for ensuring that the potential impact on the Supplier's provision, or the Buyer's receipt, of the Services is explained to the Buyer's (in a reasonable timeframe), prior to the implementation of the new or emergent standard.
- c) Where Standards referenced conflict with each other or with Good Industry Practice, then the later Standard or best practice shall be adopted by the Supplier.

### **2) Technology and Digital Services Practice**

- a) The Supplier shall (when designing, implementing and delivering the Services) adopt the applicable elements of HM Government's Technology Code of Practice as documented at <https://www.gov.uk/service-manual/technology/code-of-practice.html>

### **3) Open Standards**

- a) The Supplier shall comply to the extent within its control with UK Government's Open Standards Principles as documented at <https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles>, as they relate to the specification of standards for software interoperability, data and document formats in the IT Environment.
- a) The Supplier shall ensure that all documentation published on behalf of the Buyer pursuant to this Agreement is provided in a non-proprietary format (such as PDF or Open Document Format (ISO 26300 or equivalent)) as well as any native file format documentation in accordance with the obligation under Paragraph 3.a to comply with the UK Government's Open Standards Principles, unless the Buyer otherwise agrees in writing.

### **4) Technology Architecture Standards**

- a) The Supplier shall produce full and detailed technical architecture documentation for the Supplier Solution in accordance with Good Industry Practice. If documentation exists that complies with the Open Group Architecture Framework 9.2 or its equivalent, then this shall be deemed acceptable.

### **5) Accessibility Digital Standards**

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- b) the World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI) Web Content Accessibility Guidelines (WCAG) 2.1 Conformance Level AA; and
- b) ISO/IEC 13066-1: 2011 Information Technology – Interoperability with assistive technology (AT) – Part 1: Requirements and recommendations for interoperability.

### **6) Service Management Software & Standards**

- a) Subject to Paragraphs 1 to 3 (inclusive), the Supplier shall reference relevant industry and HM Government standards and best practice guidelines in the management of the Services, including the following and/or their equivalents:
  - (a) ITIL v4;
  - (b) ISO/IEC 20000-1 2018 “Information technology — Service management – Part 1”;
  - (c) ISO/IEC 20000-2 2019 “Information technology — Service management – Part 2”;
  - (d) ISO 10007: 2017 “Quality management systems – Guidelines for configuration management”; and
  - (e) ISO 22313:2020 “Security and resilience. Business continuity management systems. Guidance on the use of ISO 22301” and, ISO/IEC 27031:2011 and ISO 22301:2019.
- b) For the purposes of management of the Services and delivery performance the Supplier shall make use of Software that complies with Good Industry Practice including availability, change, incident, knowledge, problem, release & deployment, request fulfilment, service asset and configuration, service catalogue, service level and service portfolio management. If such Software has been assessed under the ITIL Software Scheme as being compliant to “Bronze Level”, then this shall be deemed acceptable.

### **7) Other Buyer’s Standards and Good Industry Practice Guidelines**




- a) Table 1 below sets out other standards and Good Practice Guidelines which the Supplier shall comply with and many of which are referred to in Schedule 2 (*Specification*) and the Functional & Non-Functional Requirements in Annexes A to F..



## Schedule 2 (Specification) Appendix 1

Category	Standard title	Internet link
Technology Standard	The World Wide Web Consortium (W3C) Web	Standards - W3C <a href="https://www.w3.org/standards/semanticweb/">https://www.w3.org/standards/semanticweb/</a> <a href="https://www.w3.org/TR/sdw-bp/">https://www.w3.org/TR/sdw-bp/</a> <a href="https://www.w3.org/TR/dwbp/">https://www.w3.org/TR/dwbp/</a> <a href="#">Web Content Accessibility Guidelines (WCAG) 2.1 (w3.org)</a> <a href="#">Home   Web Accessibility Initiative (WAI)   W3C</a> <a href="#">W3C Star Open Data</a>
Technology Standard	SKOS Simple Knowledge Organization System Reference	<a href="#">SKOS Simple Knowledge Organization System Reference (w3.org)</a>
Technology Standard	ISO 15836:2009	<a href="#">ISO - ISO 15836:2009 - Information and documentation — The Dublin Core metadata element set</a>
Technology Standard	ISO 22301	<a href="#">ISO - ISO 22301:2019 - Security and resilience — Business continuity management systems — Requirements</a>
Technology Guidance	The Open Web Application Security Project Top Ten	<a href="#">OWASP Top Ten Web Application Security Risks   OWASP</a>
Technology Standard	Privacy and Electronic Communications Regulations	<a href="#">The Privacy and Electronic Communications (EC Directive) Regulations 2003 (legislation.gov.uk)</a>
Technology Guidance	Open Standards principles	<a href="#">Open Standards principles - GOV.UK (www.gov.uk)</a>
Technology Standard	Open standards for government data and technology	<a href="#">Open standards for government data and technology - GOV.UK (www.gov.uk)</a>
Technology Standard	GOV.UK Service Manual – Service Standard	<a href="#">Service Standard - Service Manual - GOV.UK (www.gov.uk)</a>
Technology Guidance	GOV.UK Service Manual – Designing for different browsers and devices	<a href="#">Designing for different browsers and devices - Service Manual - GOV.UK (www.gov.uk)</a>
Technology Guidance	GOV.UK Service Manual – Design	<a href="#">Design - Service Manual - GOV.UK (www.gov.uk)</a>
Technology Guidance	GOV.UK Service Manual: Making your service accessible	<a href="#">Making your service accessible: an introduction - Service Manual - GOV.UK (www.gov.uk)</a>
Technology Guidance	Guidance for publishing data	<a href="#">New guidance for publishing data</a>
Technology Guidance	Guidance for users, publishers and sysadmins	<a href="#">Guidance for users, publishers and sysadmins</a>
Technology Standard	Sharing or collaborating with government documents	<a href="#">Sharing or collaborating with government documents - GOV.UK (www.gov.uk)</a>
Technology Standard	API technical and data standards (v2 - 2019)	<a href="#">API technical and data standards (v2 - 2019) - GOV.UK (www.gov.uk)</a>

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Technology Standard	OpenDocument V1.3 OASIS Standard	<a href="https://docs.oasis-open.org/office/OpenDocument/v1.3/os/OpenDocument-v1.3-os.zip">OpenDocument V1.3 OASIS Standard published - OASIS Open (oasis-open.org)</a>  <a href="https://docs.oasis-open.org/office/OpenDocument/v1.3/os/OpenDocument-v1.3-os.zip">https://docs.oasis-open.org/office/OpenDocument/v1.3/os/OpenDocument-v1.3-os.zip</a>
Technology Standard	DEFRA Information Systems Acquisition Development and Maintenance Policy	 Defra Group Info Systems Acquisition  This is based on ISO 27001 – Annex A.14: System Acquisition, Development & Maintenance ISO
H&S Standard	DEFRA Health and Safety Policy	 health-safety-policy-hs.pdf
Corporate Policy	Equality, Diversity & Inclusion Strategy	<a href="http://www.gov.uk">Equality and diversity - Environment Agency - GOV.UK (www.gov.uk)</a>  For context see <a href="http://www.gov.uk">Equality and diversity - Environment Agency - GOV.UK (www.gov.uk)</a>
Technology Standard	LIT59774 – Data and Information Retention Policy	 LIT 59774 - Data and Information Ret

*Table 1: Buyer's Standards*