

6. PROCESS MANAGEMENT AND DOCUMENT HANDLING

Document handling in Noark-4 is associated with the records management module, which keeps track of and manages the access to the case documents, and the module for electronic recordkeeping, which handles electronic documents storage. Chapters 4 and 5 specify requirements regarding the functionality and information content of these modules.

However, the handling of case documents in an organization must also be regarded as a process. Such a handling process typically starts off when the organization receives an inquiry (a letter) from an external source, and is finished when reply is given in the form of a letter of which a copy is filed. The process may, however, be initiated internally and result in an outgoing dispatch, or it may be an entirely internal affair where all documents are internal.

The handling process includes both recordkeeping functions and case handling. The recordkeeping functions are to be managed in Noark-4, and they should preferably be part of a close interaction with functions in an associated or integrated system for case handling according to the specifications of SGK. This chapter specifies Noark's process management during document handling, including requirements regarding functionality, the relationship between the different process stages and the rights and restrictions of the various participants. Furthermore, the process management of Noark is placed in a context spanning the entire process, which also includes the functions of an external or integrated case handling system.

First, however, it is necessary to describe and specify the handling process as such. This chapter describes the handling process of the administrative work flow. For work flow which also includes political bodies and other kinds of boards, councils and committees, see chapter 9, which specifies functionality for board handling.

6.1 The handling process: work flow and document flow

The handling process of administrative work flow may, from a recordkeeping point of view, be divided into the following three process courses:

- 1) Incoming documents: reception, registration, distribution and filing
- 2) Case handling (processing), including the production and storage of case documents
- 3) Internally produced documents: registration, dispatch (external or internal) and filing

If the case handling is due to an incoming document, the work flow includes all three process courses. If it is due to an internal initiative, it only includes the last two.

The three process courses occur primarily in this sequence, but some functions may be performed in parallel. This applies to things like the filing of incoming documents, which may occur at the end of the whole process, as well as the production and registration of documents (courses 2 and 3).

Process courses 1 and 3 primarily include recordkeeping functions, but there is some interaction between the registry office and the case handling (managers, executive officers). Process course 2 primarily includes case handling functions, but there is also a recordkeeping function associated with the filing of case documents. All three process courses therefore require certain management functions in Noark, preferably closely integrated with work flow functions in an associated case handling system.

In addition to the document-related handling process described here, one essential recordkeeping function is to keep track of the individual cases to which the documents belong, and of how the handling process develops at case level. Noark therefore also contains certain control mechanisms for the handling process at case level.

Following is a description of the most common procedures regarding the various handling courses. Document production and the handling of internally produced documents (courses 2 and 3) are treated together because they are normally tightly interwoven. A separate paragraph, 6.1.3, gives a more detailed description of procedures and functions relating to electronic case handling and document flow, as they may be defined in an integrated interaction between Noark and an associated case handling system.

6.1.1 Handling incoming documents

Incoming documents are case documents which the organization receives from some external organization. In Noark, these are registered as document type I.

If the recordkeeping and internal document flow is *paper-based*, Noark-4 should support the following procedures:

- 1a) Centralized mail reception receives paper documents as mail or fax.
 - Registry office stamps, applies filing plan code and registers in Noark as well as produces mailing list or daily registry.
 - Registry office distributes to case distributor (manager) or straight to executive officer, possibly accompanied by mailing list to manager.
 - Any case distributor (manager) distributes to executive officer; distribution is registered in Noark directly or via feedback to the registry office.
 - Manager informs registry office about what is to be exempt from public access and, possibly, registers this directly in Noark.
 - Registry office presents public register (electronic export or paper printout).
 - Depreciation of registry entry in Noark as well as filing are carried out as documents return to the registry office after processing, together with any outgoing replies.

- 1b) Executive officer receives case document on paper straight from sender, as mail or fax.
 - Executive officer forwards document to registry office; then: as 1a.

- 1c) Centralized mail reception receives documents as e-mail or datafax.

- If documents are considered case documents, they are printed on paper; then: as 1a.

1d) Executive officer receives case document as e-mail or datafax straight from sender.

- Executive officer forwards document to registry office; then: as 1c.

Alternatively:

- Executive officer registers (temporarily) the document in Noark and forwards it to the registry office; then: as 1c.

If the recordkeeping and internal document flow is *electronic*, integrated with or in an electronic case handling system (cfr. SGK), Noark-4 must support the following procedures (see also 6.1.3, which gives a more detailed description of electronic work flow and document flow):

1e) Centralized mail reception receives documents as e-mail or datafax.

- Registry office registers in Noark, checks any automated registration effectuated on the basis the Noark "head" (see ch. 10) and immediately files documents in electronic records.
- Registry office distributes electronically to case distributor (manager) or straight to executive officer.
- Any case distributor (manager) distributes to executive officer; distribution is registered in Noark.
- Manager temporarily suspends block of public access in Noark and, if appropriate, applies access code.
- Registry office presents public register (electronic export or paper printout).

As a rule of thumb, it is assumed that all case handling and management functions are carried out from the parties' normal user environment in the case handling system.

1f) Executive officer receives case documents as e-mail or datafax straight from sender.

- Executive officer forwards document to registry office; then: as 1e.

Alternatively:

- Executive officer temporarily registers in Noark and files document or forwards to registry office for filing.
- Case handling (processing) may start immediately or be delayed until distribution procedure is completed as in 1e; then: as 1e.

1g) Centralized mail reception receives documents on paper, as mail or fax.

- Document is scanned, registered in Noark and filed electronically.
- The original is filed or disposed of, depending on whether paper-based or electronic version is archival copy; then: as 1e.

1h) Executive officer receives case document on paper straight from sender, as mail or fax.

- Document is forwarded to registry office; then: as 1g.

In principle, combinations of the above procedures are possible. For instance, the executive officer may register received documents even if the recordkeeping is paper-based, or the document flow may be electronic while filing is carried out on paper. However, this would

not pose any further functional requirements in Noark beyond what follows from the above procedures.

6.1.2 Handling internally produced documents

Internally produced documents are the results of internal processing of some kind - letters, memos, reports, drafts, etc. In Noark, they are registered as being of document type U, N, X or S.

If the recordkeeping and document flow is *paper-based*, Noark-4 should support the following procedures:

2a) Executive officer or manager registers, finalizes and dispatches case document.

- (If new case:) Executive officer reserves new case in Noark.
- Executive officer reserves (temporarily registers) the first available registry entry of the case.
- Document is finalized in paper printout and with the required copies, etc. (by executive officer and, if appropriate, one or more managers and, possibly, typist service).
- Document is dispatched (by executive officer, manager or separate service).
- Executive officer/manager may depreciate incoming document.
- File, including copies, any drafts to be filed and any previous documents in the case are forwarded to the registry office for filing.
- The registry office checks and, if appropriate, finalizes the registration in Noark, possibly depreciates the registry entry for incoming document and files the documents.

2b) Executive officer finalizes document draft and forwards it to others for final processing and dispatch.

- Executive officer finalizes draft on paper and, possibly, in a word processor file which is available to others involved in the process.
- Any manager(s) add corrections to the draft.
- Finalized draft forwarded to anteroom or similar, which
 - (if new case) reserves new case in Noark or inquires registry to reserve new case
 - (if registry entry is to be applied to document as reference) reserves (temporarily registers) first available registry entry in case
 - finalizes document
- Document is sent for signing and dispatched (by executive officer, manager or separate unit).
- File, including copies, any drafts to be filed and any previous documents in the case, are forwarded to the registry office for filing.
- The registry office registers in Noark or checks and, if appropriate, finalizes the registration effectuated, possibly depreciates the registry entry for incoming document and files the documents.

There may also be procedures which are somewhere between 2a and 2b, e.g., drafts which have been processed by the manager may be returned to the executive officer for finalization, or the manager himself may finalize the document. However, this would not pose any further functional requirements in Noark beyond what follows from 2a and 2b.

If the recordkeeping and internal document flow is *electronic*, integrated with or in an electronic case handling system (cfr. SGK), Noark-4 should support the following procedure:

2c) Executive officer and/or manager registers and finalizes document in electronic form and dispatches it via e-mail or on paper (mail, fax)

- (If new case:) Executive officer reserves new case in Noark
- Executive officer reserves (temporarily registers) first available registry entry in the case and associates the document(s) with it.
- Document(s) is (are) finalized electronically (by executive officer and, if appropriate, one or more managers).
- Document(s) is (are) dispatched electronically or in paper printout (by executive officer, manager or separate unit).
- Executive officer/manager depreciates any incoming document.
- The finalized electronic edition(s) of the document(s) is (are) forwarded to the registry office for checking and filing.
- The registry office checks and, if appropriate, finalizes the registration in Noark, including any depreciation of the registry entry for incoming document, and files the document(s).

2d) The executive officer and/or manager produces document in an external production system (case handling system or word processor), whether or not integrated with the Noark system, and transfers it to the Noark system for registration, dispatch and filing.

- The executive officer/manager finalizes the document in the production system; then: as 2c.

As a rule of thumb, it is assumed that all case handling and management functions are carried out from the parties' normal user environment in the case handling system. A more detailed description of electronic work flow and document flow is given in the next paragraph.

6.1.3 Electronic work flow and document flow

Electronic work flow and internal document flow may improve the efficiency of an organization considerably. At the same time, such a handling process requires that work procedures be modified considerably compared to what is common practice today. The following gives a more detailed description of how such a handling process may be prepared. The emphasis is on recordkeeping and case handling procedures, and it is assumed that the functionality of Noark-4, integrated with or in a case handling system, is exploited.

Mail reception

Incoming documents are received, preferably in a centralized mail reception, but some are likely to be sent straight to the executive officers. The following procedures must be enforced during the reception phase (the sequence may vary slightly, depending on how the recordkeeping and case handling systems are designed):

- Documents are registered/entered into records (records management module of Noark) either by the registry office or by the executive officer with subsequent control by the registry office. If documents are received by e-mail from an organization that uses

Noark, parts of the registration may be carried out automatically if a Noark "head" is used (see ch. 10).

- If the documents are received in paper form (mail, fax), they must be transferred to electronic form by scanning. This operation should always be carried out by the registry office. The documents may be processed into text form by OCR software, but the OCR version is to be considered an adapted version and cannot be used as archival copy (see below regarding OCR as a tool for executive officers).
- The documents are filed electronically in an approved archival format, cfr. ch. 5. If the recordkeeping is electronic, any originals in paper form may be disposed of, or they may be filed as a kind of backup measure. The processing is based on the electronic version of the document, which is considered the archival copy.

Distribution and presentation of public register

Distribution of incoming documents for processing involves registering the administrative unit and, possibly, the executive officer in Noark. If the executive officer is registered, responsibility for case handling (processing) is assigned to him or her. If only the administrative unit is registered, the responsibility for case handling is assigned to the manager of the unit. The subsequent procedure should be approximately as follows:

- Managers and executive officers should automatically be presented with a summary of new cases for processing (i.e., received documents). This may be effectuated through a case handling system or by other means integrated with the recordkeeping system. If no such means are available, managers and executive officers should be able to search for their cases in a simple way from their normal user environments.
- Documents which have been assigned to a manager (or possibly a designated case distributor), are further distributed to the executive officer. This is effectuated by registering the executive officer. The rest of the procedure is as in the previous indent.
- If the organization is temporarily exempting documents from public access (see paragraph 8.2.2.4), the person responsible for the initial case handling (normally the manager) should decide whether the document and/or registered information should be exempt from public access. Once a decision has been made, the blocking code (access code XX) in the recordkeeping system is suspended and access code and, if appropriate, access group are registered in cases where information is to be screened.
- The registry office presents public register for documents whose temporary blocking has been suspended, cfr. paragraph 8.2.2.5.

Case handling and document production

Once an executive officer has received a document for processing, the case handling itself is sparked off, comprising of case preparation, evaluation and decision as well as document production. Alternatively, the case handling (processing) may be initiated on the basis of an internal initiative. The processing as such is outside the scope of the registry and should not be handled by Noark. However, some tasks relating to document production concern the recordkeeping function and thus Noark. Noark-4 should be designed to maintain these functions in a way that fits in with a rational handling process. It is therefore necessary to describe this process in order to maintain such tasks in Noark.

The following procedures and functions should be maintained:

- As part of the case preparation, an executive officer should be able to retrieve documents and other information from the records and other internal and external electronic sources of information. This should preferably be effectuated from the same user environment, cfr. the description of the interaction between Noark and SGK in paragraph 2.2.2, figure 2-1.
- To be able to reuse parts of documents which have been scanned (stored in TIFF or similar format), the executive officer should have access to an OCR tool which transforms (parts of) the document into a format which may be edited. This tool should be integrated with the case handling system but does not concern Noark (even if the documents which are processed, will often be retrieved from electronic records).
- The document production may take place entirely outside of or more or less integrated with Noark. If the document being produced is known to be a case document which is to be registered in the recordkeeping system, using the link with Noark in the document production, in accordance with the principles described in the following, will normally be rational and improve the quality. This maintains rational transfer of information between registry and document, correct linking in the registry and secure depreciation linking between document and reply document.
- When the executive officer is producing a new document, he associates it with the first available registry entry in the case he is working with, or he may ask for the first available case number in order to create a new case. Both should be attainable through the use of simple commands from his normal user environment, and should result in automated registration in the recordkeeping system.
- The executive officer registers the necessary registry information, such as addressee, title and references. For reply letters, a temporary depreciation link is established with the received document (formal depreciation is carried out later), and most of the registration may be automated by transferring information from this. In the production system (case handling system or word processor), the executive officer retrieves a document template for the category of document he wishes to produce, and relevant information is automatically transferred from the recordkeeping system: addressee, title, references, etc. The document templates should be designed so as to address the need to transfer relevant information between the records management of Noark and the document.
- The executive officer should be able to decide who is to have access to the document as long as he is producing it. Still, the person responsible for the case (if different from the executive officer) as well as the manager(s) of the concerned administrative unit should have access to the document in special circumstances, e.g., if the executive officer is away, if he has quit his job, etc. Apart from this, read and write access to the document is reserved for the executive officer and any person to whom he has explicitly granted access. Only when the executive officer has finalized a draft or finalized the document for dispatch should it be available to others.
- The executive officer and his/her manager(s) should be able to produce and file an arbitrary number of versions. From a recordkeeping point of view may be envisaged the following alternative procedures, which Noark should be able to handle:
- After the initial linking up with the recordkeeping system as described above, document production proceeds in the document production system with Noark knowing only that a document is being produced. During production or after the document has been

finalized, it should be stored in Noark in one or more versions, and the registry information should be updated accordingly. Versions stored in Noark may not be modified. When the document has been completed in its final version, it is dispatched, and finishing recordkeeping functions are carried out as described below.

- The executive officer prepares a document, finalizes it and files it in Noark. If the document is finalized, i.e., the manager does not need to check or process it further, it is immediately sent off for dispatch and finalizing recordkeeping functions. If the document is a draft which some manager(s) is (are) to process further, it constitutes the initial version of the document and is thus filed in permanent form. The same procedure may be repeated at several stages, for instance from the section manager to the department manager and from the department manager to the director general. After the last person has finalized the document, it is sent off for dispatch and finalizing recordkeeping functions.
- The executive officer and any manager(s) or other involved party prepares a document which is finalized in only one version. The document is available from Noark during the whole process, with the restrictions indicated above. When the document is finalized, it is filed permanently and sent off for dispatch and finalizing recordkeeping functions.

Finalization, dispatch and finalizing recordkeeping functions

When a document is completed in its final version, the person who finalizes the processing (executive officer or manager) indicates that the document is finalized. This is a go-ahead signal for dispatch and finalizing recordkeeping functions. Parts of these functions should be carried out by the executive officer or manager, the rest by the registry office. The registry office is also responsible for quality control of recordkeeping functions carried out by the executive officer or manager. The following procedures are involved:

- Dispatch may be effectuated electronically (via internal or external e-mail), via fax or on paper (traditional mail). Electronic dispatch should preferably take place in an e-mail system which is integrated with the recordkeeping system, but may also be carried out in a separate system, cfr. ch. 10. The dispatch should be carried out by the manager/executive officer or by the registry office. Unless the checking may be carried out by the system, the person who carries out the dispatch must make sure the dispatched copy is identical to the archival copy. It is also worth considering the need to check that an electronic dispatch reaches the addressee in readable and unaltered form.
- For all filed versions of a document, the system should automatically register who has carried out the filing. This makes it possible to check that the final version of the document originates from the executive officer/manager indicated in the document. If further security is needed for the authenticity of documents during internal processing, digital signatures may be used (see ch. 10).
- The executive officer should be able to depreciate one or more received documents using automated functions when a reply document is dispatched. In such a case, the system should include functionality for handling a situation where some organizations require the authorization of a manager for the depreciation to be valid. If neither manager nor executive officer carries out depreciation, the registry office is responsible for it.
- It will usually be necessary, or at least appropriate, to evaluate the necessity of public access when a document is finalized and dispatched. The executive officer and/or

manager should be able to suspend any temporary blocking and register any access codes for documents which are finalized, including registry and case information.

- After finalization and dispatch, the document (final version) should be stored in archival format. This task is best assigned to the registry office. However, it should also be possible for the executive officer or manager to do this, especially in those cases where they dispatch documents electronically and the exchange format is identical to the archival format.
- The registry office performs the necessary checks on registry information and finalizes the registration.

6.1.4 Communication via the Internet (web pages)

There are cases where a public body communicates with other organizations through web pages on the Internet. For instance, a letter and attachments may be published on a web page and comments invited. The organizations may be able to add their comments directly to the web page. In such cases, the web page replaces the documents which would normally have been sent to the organization(s) and registered and filed there.

This kind of communication is problematic from a legal, recordkeeping and practical point of view. It raises important questions, such as: How does one define archival documents in this context, and where does one file them? How is this communication to be entered into records, and how is it to be guaranteed that the communication is presented in the public register in accordance with the regulations? These are questions which must be evaluated by the National Archivist and other relevant authorities, taking into account the Archives Act and the Freedom of Information Act, etc.

Noark-4 is not trying to prescribe specific solutions for this kind of communication. It is not the task of Noark to illuminate the professional and legal problems raised by this kind of communication. However, it is assumed that solutions can and should be found within the framework of registration and electronic recordkeeping specified by Noark-4.

It is emphasized that the communication via web pages that is described here, should not be confused with »ordinary» information published on web pages. Information retrieved from the Internet in connection with case handling (processing) is not considered records material unless it is part of a case in a way that ought to be documented. The reader is referred to the discussions on records weeding in paragraph 2.1.2 and SGK document storage in paragraph 2.2.2.

6.2 The process management functions of Noark

Noark systems should have mechanisms for controlling *what recordkeeping functions* may be performed *when* and *by whom* during the different phases of the handling process. This kind of process management should form the basis of the more sophisticated *quality control* functions which are required when executive officers are allowed to perform certain defined registration and updating functions themselves. It is assumed that the process management will interact with detailed access management, centralized subsequent control of registrations and automated logging of effectuated changes in defined areas.

The starting point of the process management is the various recordkeeping functions (the activities during registration and filing), subdivided into defined process phases. Each phase is associated with one or more alternative status values. Each status value is associated with rules which define what functions should be available and what restrictions should apply for the various parties involved at the process stage in question. The rules also specify conditions which must be satisfied for a status value to be modified, and thus for the process to move on to the next stage.

The process management is associated with three main categories of parties involved: the *registry office* (archives, archivists), *executive officers* and *managers*. This chapter describes the parties' specific registration rights at the various process stages. For further details on user rights, see chapter 8.

The process management of Noark-4 is associated with the status attributes in the tables *Case*, *Registry entry* and *Document description*.

K6.1	Rights regarding the registration of case information should be managed through values in the attribute <i>Case status</i> in the table <i>Case</i> .	O
K6.2	Rights regarding the registration (entry into records) of incoming and internally produced documents should be managed through values in the attribute <i>Registry status</i> in the table <i>Registry entry</i> .	O
K6.3	It should be possible to configure the system so that the process management is not used for one or more registry management units, or for the entire base. This should lead to the attribute <i>Registry status</i> automatically being assigned the value J when the registry entry is created. In an enhanced version (requirement type O1), it should nevertheless be possible to change the value to A according to the rules described in this chapter. Rights regarding registering information in the registry entry are managed through the values in <i>Registry status</i> in the usual manner (see K6.2).	O
K6.4	Rights regarding electronic document production and filing should be managed through values in the attribute <i>Document status</i> in the table <i>Document description</i> .	O2
K6.5	If Noark is integrated in or with an electronic case handling system (cfr. SGK) or a similar system, then: <ul style="list-style-type: none"> It should be possible to modify values in <i>Case status</i>, <i>Registry status</i> and <i>Document status</i> using automated functions in Noark, effectuated when the user issues commands or defines status values, etc., in the case handling system. 	S

	<ul style="list-style-type: none">• Values in <i>Case status</i>, <i>Registry status</i> and <i>Document status</i> should manage user rights in Noark even when Noark functions are accessed from the case handling system.	
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Otherwise, the process management is based on the following principles:

- The next process stage is entered into by changing a status value. Defined activities must be completed (and registered) for the system to accept a change to the next status value. This control function should ensure the complete execution of the registration task.
- For executive officers and managers, a change of status code should at the same time block any activities relating to previous process phases. The registry office should have registration access during most process phases, even for registering on behalf of the executive officer or manager. For some process phases, however, it is assumed that the registration access of the registry office is limited to special purposes, such as correcting errors. The registry office should not be able to change the contents of *documents* or *notes* created by executive officers or managers.
- The status code is modified when the activities relating to a process stage are completed. The modified status value will then be a signal - usually to some other involved party - to perform follow-up activities. It is up to the individual vendors to add functions for alerting various parties and providing summaries of tasks for which they have follow-up responsibilities.
- When the entire process has a status that signifies "finished", registration opportunities should generally be blocked. These blocking mechanisms should prevent unauthorized or inadvertent modification of registered information. There should nevertheless be options for defining the status of the previous stage in order to correct errors, tackle unexpected circumstances, etc. Such options are normally reserved for the registry office.

The system should offer alternative status values at the different process stages to make it possible to choose between *alternative process courses* during registration. This should adapt the system to a variety of uses. The process management includes status values adapted to traditional, centralized registration and paper-based recordkeeping as well as to electronic case handling where executive officers and managers themselves perform registration tasks. The system must, furthermore, make it possible to combine different uses, so that alternative process courses may run in *parallel* within the same organization. Such a combination of uses will be in demand as long as electronic and paper-based recordkeeping are carried out side by side. The options are also necessary for it to be possible to adapt the system in a flexible way to a diversity of organizations and procedures as well as the widely diverse levels of competence in the user organizations

The process management functions are detailed based on the figures below. Status values are associated with the individual process phases as "flags". In each status value, all previous codes in the sequence will be logically incorporated. The value **A** thus indicates that all previous activities in the process have been completed.

The process management has a flexible design with regard to the distribution of roles between managers and executive officers. It does not include status values for managers' authorizations of registrations, but leaves the more detailed handling of the manager/executive officer relationship to a surrounding case handling system.

It should be possible to perform all registration tasks which managers or executive officers carry out, within their normal user environments, i.e., in an associated or surrounding case handling system. In such a case, it must be possible to update the Noark status values on the basis of registrations carried out in the case handling system. However, unless Noark is part of an integrated interaction with a case handling system, the registrations of the executive officers and managers must be carried out directly in the Noark system.

6.2.1 Process management for cases and case information

New cases are created in Noark when documents which constitute a case are received or produced, i.e., documents which address a new question for processing, cfr. 4.2.1 above. A case must be created before the associated documents (registry entries) may be registered, and the case must permit new registrations to be carried out. When a case is finalized, it should be blocked to any kind of registration and updating of both case information and associated registry entries and documents.

The process management is associated with the following values in the attribute *Case status*:

- R** = Reserved by executive officer (or by the registry office or a manager on behalf of the executive officer)
- B** = Being processed
- A** = Finalized
- X** = Case exempt from process management
- U** = Case dismissed

The value R is assigned when the executive officer (or other person on behalf of the executive officer) reserves a new case in order to register a self-produced or incoming document. When the registry office registers a new case or updates the registrations of a reserved case, the value B is assigned. The value A is assigned when all new registration and updating in or regarding the case should be completed, for instance in connection with periodic completion.

If more detailed process management is desired, for instance in connection with board handling (see chapter 9), the value B may be replaced with customized values. In such a case, different characters from the ones predefined above must be used.

If process management through case status is not desired, the value X may be used as a default value and all cases assigned this value. Alternatively, R may be used for reservations by the executive officer and X as a fixed value when the registry office has registered or updated something.

Functional requirements regarding case status:

- AR** = Registry office ["Arkiv"]. Rights and responsibilities may apply to the entire base or be limited to the concerned registry management unit, depending on the roles of the party involved (see chapter 8).
- LD** = Manager ["Leder"]. Rights and responsibilities are limited to the person's administrative unit, cfr. ch. 8. (Note that when a person who is a manager fills the role as executive officer, he is indicated by SB in the table below, cfr. ch. 8).

SB = *Executive officer* ["Saksbehandler"]. Rights and responsibilities are limited to cases where he or she is case responsible, or registry entries for which he or she is executive officer. Responsibility is limited to cases for which he or she is case responsible. See also chapter 8.

When AR, LD or SB is in brackets, it means that they should be assigned the right concerned in the system, but that it is only meant to be used in special circumstances, e.g., in order to correct errors or when the party originally vested with the rights cannot perform the task himself.

Re-quirement no.	Status value	1) Status value set by: 2) Condition for setting value:	Follow-up responsibility assigned to	Right to register	Right to modify status	Type of requirement
K6.6	R	1) SB, (AR), (LD). 2) Executive officer registered automatically or manually.	AR	AR, SB, (LD)	AR	O
K6.7	B	1) AR. 2) Set automatically as AR creates case or updates case with status R.	AR	AR: generally. SB, LD: attributes according to ch. 8.	AR	O
K6.8	A	1) AR. 2) Presupposes that all associated registry entries have <i>Registry status</i> J or A (for systems which have this attribute). If the case is stored electronically, registry status is assumed to be A.	None	AR, LD, SB: attributes according to ch. 8.	AR	O
K6.9	X	1) AR. 2) Set automatically as an alternative to B when X is defined as default value.	AR	AR: generally. SB, LD: attributes according to ch. 8.	AR	O
K6.10	U	1) AR	None.	None	AR	O

K6.11	When SB reserves a new case, he should automatically be designated case responsible, and he should not himself be able to modify these values. AR and LD for the concerned administrative unit should be able to modify the values.	O
K6.12	It should be possible to replace the value B in <i>Case status</i> with customized values, configured in the system. The letters R, B, A, X and U may not be used for such values.	A

6.2.2 Process management for registering incoming documents

Incoming documents (document type I) are registered (entered into records; records management module) and then distributed for processing (case handling). When the processing has been completed, the document returns to the registry office for finalizing registration, including depreciation if not carried out by executive officer. Electronic documents are filed in connection with initial registration, i.e., before processing. Paper documents are filed after processing has been completed.

The recordkeeping aspect of document processing is controlled by the following registry status values:

- M** = Temporarily registered by the registry office
- S** = Initially registered *or* updated by the executive officer/manager
- J** = Registered *or* checked by the registry office
- A** = Registration finalized (by the registry) office

The following figure illustrates the process: alternative process courses, different stages, parties involved and status values.

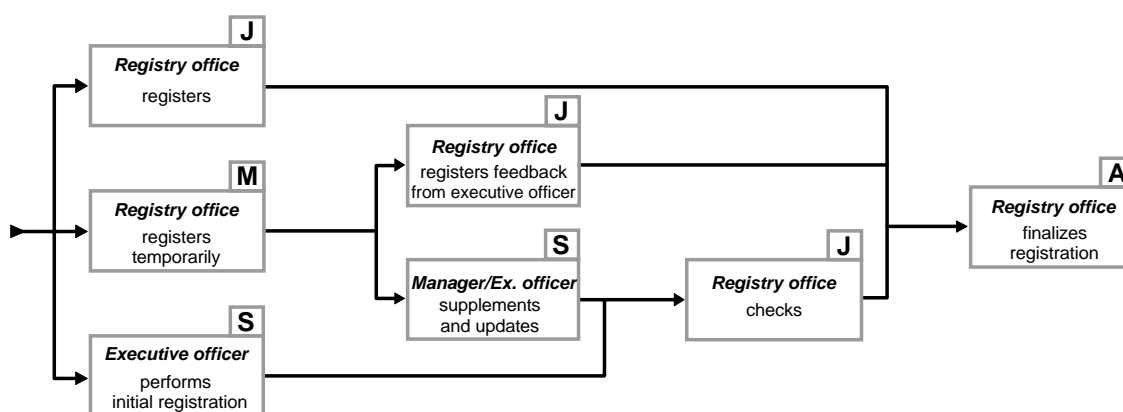


Figure 6-1: Incoming document - handling process, change of registry status

The status value **M** is used by the registry office as a signal to the manager/executive officer to update the registry entry (typically, to register the responsible executive officer). **S** is used by executive officers and managers when they themselves perform the initial registration or update what is registered in the records. When the role of the registry office is limited to checking the registrations performed by executive officers/managers, a change of status value to **J** indicates that checking has been carried out. The value **A** is used to indicate that the registration is finalized and to block any attempt to make changes.

Functional requirements regarding registry status for incoming documents:

AR = Registry office ["Arkiv"]. Rights and responsibilities may apply to the entire base or be limited to the concerned registry management unit, depending on the roles of the individual party, cfr. ch. 8.

LD = *Manager* ["Leder"]. Rights and responsibilities are limited to the person's administrative unit, cfr. ch. 8. (Note that when a person who is manager, acts as executive officer, his role is indicated as SB in the table below, cfr. ch. 8).

SB = *Executive officer* ["Saksbehandler"]. Rights are limited to cases for which the person is case responsible, or to registry entries for which he is executive officer. Responsibility is limited to cases for which he is case responsible. See also chapter 8.

Enclosing AR, LD or SB in brackets indicates that they are to be assigned the indicated right in the system, but that it is only meant to be used in special circumstances, such as for correcting errors or when the person who was originally assigned the right, is not able to complete the task himself.

Re-quirement no.:	Status value:	1) Status value set by: 2) Condition for setting the value:	Follow-up responsibility assigned to:	Right to register:	Right to modify status:	Type of requirement:
K6.13	M	1) AR. 2) Status M or J set automatically if AR registers. It should be possible to configure a default value.	SB: if executive officer is registered LD: if only adm. units are registered AR: if both are absent	AR, LD, SB	AR, LD, SB	O1
K6.14	S	1) SB/LD. 2) Status S set automatically when SB or LD registers.	AR	AR, LD, SB	AR	O1
K6.15	J	1) AR. 2) In the enhanced version, status is set to M or J automatically if AR registers. It should always be possible to configure a default value. The value J is not permitted unless adm. unit is registered (the value is then set to M instead). In the basis version, the status is always set to J when AR registers.	AR	AR: generally. SB: attributes according to ch. 8.	AR	O
K6.16	A	1) AR. 2) Presupposes that the registry entry has been depreciated. <i>Document status</i> must be F for all electronic documents associated with the registry entry, and they must exist in an archival format if the	None	AR, LD, SB: attributes according to ch. 8	(AR)	O1

		case is to be filed electronically.				
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6.2.3 Process management for registering internally produced documents

Internally produced case documents should be dispatched either externally (document type U) or internally (document types N, X and S). The document production may either follow the integrated procedure described in 6.2.4, or it may be carried out entirely independently of the recordkeeping system - e.g., as production in a normal word processor and filing on paper.

Irrespective of the production form, all documents should be entered into records (records management module of Noark). If the document production is integrated, as described below, the registration (entry into records) happens as a natural part of the production. If the production is carried out independently of the recordkeeping system, registration is normally carried out after the documents have been finalized, possibly accompanied by a temporary registration (reservation of registry entry) when the registration commences.

The recordkeeping aspect of the document handling is controlled by the following values in *Registry status*:

- R** = Reserved by executive officer, manager or registry office
- F** = Finalized by executive officer or manager and ready for dispatch
- E** = Dispatched by executive officer, manager or other party
- J** = Registered *or* checked by registry office
- A** = Finalized by registry office

The following figure illustrates the process: the alternative process courses, different stages, parties and status values.

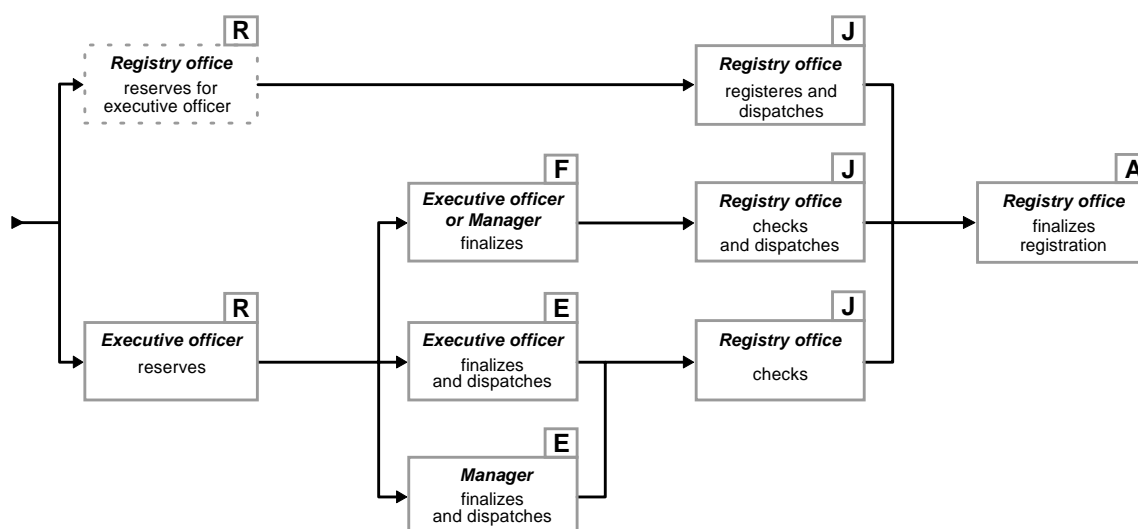


Figure 6-2: Internally produced document - handling process, change of registry status

The status value **F** is used by executive officers/managers when they do not effectuate the dispatch themselves. F is then a signal to the registry office or other party to effectuate dispatch. When executive officers/managers *both* finalize and dispatch, the value **E** is used (F is then considered as logically incorporated in E, and is not used as a step in between). When the registry office *both* registers and dispatches, the status should be set to **J** without E being used in between. In such cases, dispatch (E) is logically incorporated in J.

Functional requirements regarding registry status for internally produced documents:

- AR** = *Registry office* ["Arkiv"]. Rights and responsibilities may apply to the entire database or be limited to the concerned registry management unit, depending on the roles of the individual party, cfr. ch. 8.
- LD** = *Manager* ["Leder"]. Rights and responsibilities are limited to the person's administrative unit, cfr. ch. 8. (Note that when a person who is manager, acts as executive officer, his role is indicated as SB in the table below, cfr. ch. 8).
- SB** = *Executive officer* ["Saksbehandler"]. Rights are limited to cases for which the person is case responsible, or to registry entries for which he is executive officer. Responsibility is limited to cases for which he is case responsible. See also chapter 8.

Enclosing AR, LD or SB in brackets indicates that they are to be assigned the indicated right in the system, but that it is only meant to be used in special circumstances, such as for correcting errors or when the person who was originally assigned the right, is not able to complete the task himself.

Re-quire-ment no.	Status value	1) Status value set by: 2) Condition for setting the value:	Follow-up responsibility assigned to	Right to register	Right to modify status	Type of re-quire-ment
K6.17	R	1) SB, (AR), (LD). 2) Executive officer registered automatically or manually.	SB	SB, (AR), (LD)	SB, (AR), (LD)	O
K6.18	F	1) SB, LD. 2) Presupposes that all electronic documents associated with the registry entry have <i>document status = F</i> .	AR	AR: generally. SB, LD: attributes according to ch. 8.	AR, (SB), (LD)	O
K6.19	E	1) SB, LD. 2) As for the value F. In addition, <i>Dispatch date</i> must be filled in.	AR	AR: generally. SB, LD: attributes according to ch. 8.	AR, (SB), (LD)	O1
K6.20	J	1) AR. 2) As for the value F. If the main document is electronic, then the attribute <i>Dispatch date</i> must be filled in.	AR	AR: generally. SB, LD: attributes according to ch. 8.	AR	O

K6.21	A	1) AR. 2) as for the value J. All electronic documents must exist in archival format for the case to be considered electronic. If the document type is N, then the registry entry must be depreciated.	None	AR, LD, SB: attributes according to ch. 8.	(AR)	O1
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K6.22	When a registry entry is created with status R , it should not be assigned a document number. The document number should be assigned automatically by the system when the status is changed from R to F , E or J .					O
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6.2.4 Process management for electronic document production and electronic filing

The production of electronic case documents is a case handling function, as described above. This function should ideally be maintained by a case handling system, based on the specifications of SGK and closely integrated with Noark - e.g., by incorporating both types of functions within the same system. Without access to a case handling, linking the Noark system as closely as possible to a word processor might be an acceptable solution.

The filing of electronically produced documents, however, is a recordkeeping function within the domain of Noark. Noark must possess functionality for maintaining the interaction between executive officers and the registry office in connection with the filing of electronic case documents. It must be possible to carry out the filing as a natural and integrated part of the production process which includes documents in different versions and formats.

The process management of Noark-4 is thus limited to the recordkeeping functions, and it presupposes an interaction with a surrounding case handling system (or similar system). Noark should primarily keep track of the stored versions and formats, cfr. the table *Version*, and know whether a document is finalized or not, cfr. the attribute *Document status* in the table *Document description*.

An integrated solution presupposes that the table *Document description* should be shared by Noark and the case handling system. Thus, Noark imposes no restrictions with regard to the values of the attribute *Document status*. The only requirement is that the status of **F** should indicate a finalized document; otherwise, there are no restrictions. If Noark is not incorporated in an integrated solution, it is recommended that the status of **B** is used to indicate that a document is being processed and not yet finalized. This value is used in the following description to indicate »not finalized».

The following values may be used for *Document status*:

- B** = Being processed by executive officer. This value may be replaced by one or more other values.
- F** = Finalized by executive officer. Obligatory value in Noark-4.

The status of B (or similar) is set automatically when the executive officer creates a document, for instance from an associated case handling system or a word processor. When the document is completed and stored in Noark (possibly in several versions), the executive officer/manager changes the document status to F. This transfers follow-up responsibility to the registry office. The executive officer/manager may, however, on certain conditions, return the status to B if circumstances so dictate.

Functional requirements regarding document status for electronic documents:

- AR** = Registry office ["Arkiv"]. Rights and responsibilities may apply to the entire database or be limited to the concerned registry management unit, depending on the roles of the individual party, cfr. ch. 8.
- LD** = Manager ["Leder"]. Rights and responsibilities are limited to the person's administrative unit, cfr. ch. 8. (Note that when a person who is manager, acts as executive officer, his role is indicated as SB in the table below, cfr. ch. 8).
- SB** = Executive officer ["Saksbehandler"]. Rights are limited to cases for which the person is case responsible, or to registry entries for which he is executive officer. Responsibility is limited to cases for which he is case responsible. See also chapter 8.

Enclosing AR, LD or SB in brackets indicates that they are to be assigned the indicated right in the system, but that it is only meant to be used in special circumstances, such as for correcting errors or when the person who was originally assigned the right, is not able to complete the task himself.

Re-quire-ment no.	Status value	1) Status value set by: 2) Condition for setting the value:	Follow-up responsibility assigned to	Right to register	Right to modify status	Type of re-quire-ment
K6.23	B (or other values)	1) SB 2) Executive officer registered automatically.	SB	SB, (LD), (AR)	SB, LD	O2
K6.24	F	1) SB, LD. 2) Presupposes that the document is filed in Noark (in one or more versions).	AR	AR: generally SB, LD: attributes according to ch. 8.	(AR), (SB), (LD)	O2

If the document production itself is integrated with Noark, it takes place when *document status* is B or similar, and it should be completed before status is set to F. See the description of electronic document production in 6.1.3 above.

K6.25	Internal document production should take place in a system which is integrated with Noark, preferably in an integrated case handling system (cfr. SGK), or, if this is not possible, in a standard word processor with established links to/from Noark. The integration should include functions for automated and structured transfer of information between the registry entry and the document description in Noark on the one hand and the document in the production system on the other hand.					S
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K6.26	When a document is created (<i>document status</i> B or similar), the access code of the document should automatically be set to XX , cfr. temporary blocking of recently registered information in paragraph 8.2.3.4.	O2
K6.27	As long as a case document has not been dispatched (i.e., associated with a registry entry with <i>registry status</i> E , J or A), whoever is responsible for registering the document according to K6.24 should be able to »take it back« for further processing by changing the <i>document status</i> from F to another value. In such a case, the <i>registry status</i> should automatically be set to R . Filing of the document in a processed form means filing a new version, cfr. K6.30.	O2

If document production takes place in a production system which is integrated with Noark as described in K6.25, it should be possible to use the following document production procedures:

- A new document is created in Noark using a command in the production system, and the necessary information in the document description and registry entry (if new) is registered. The system sets *document status* to **B** (or other similar value), and the relevant information from the document description and registry entry is automatically transferred to the document. The production and temporary storage of the document in one or more versions takes place in the production system. If necessary, it should be possible to file one or more versions in Noark. This should take place during the production process, i.e., while the *document status* is still **B** (or similar), or after the production is completed, i.e., when *document status* is set to **F**.
- The production starts in the production system, independently of Noark, and temporary storage is carried out there. When one or more versions are to be filed in Noark, the document is created in Noark and assigned *document status* **B** or **F**, depending on whether the production process is completed or not. It should be possible to create the document in the production system (as above) and to have information automatically transferred from that system to the document description and registry entry.

If the Noark system includes electronic records, but is not integrated with a case handling system or other production system which satisfies the requirements of K6.25, adding functionality for integrated document production linked directly to the Noark system ought to be considered. This presupposes that a direct link between Noark and a word processor. The functionality should, as a minimum, include automated transfer of information between *Document description/Registry entry* and the document as well as mechanisms for indicating whether a document version is being processed or has been finalized and thus filed. Such mechanisms are not included in the technical description of Noark-4.

Noark should be able to file and guarantee the integrity of an arbitrary number of electronic versions of a case document. This applies to both documents received from an external source and internally produced documents, irrespectively of whether they have been produced in a system integrated with Noark or not.

Functional requirements regarding the filing of document versions:

K6.28	Any person who has registration rights to a registry entry (see paragraph 8.2.2), should be able to associate an arbitrary number of electronic case documents (main document and any attachments) to the registry entry and file them in an arbitrary number of versions and formats. This applies to documents received from external sources as well as internally produced documents, whether the production is integrated with or independent of Noark.	O2
K6.29	It should not be possible to file new versions of documents which have <i>document status F</i> .	O2
K6.30	It should not be possible to modify or edit document versions which have been filed in Noark. However, it should be possible to delete them in accordance with specific rules, cfr. K6.31-K6.33.	O2
K6.31	As long as the <i>document status</i> is different from F , it should be possible to delete versions of documents which have been filed in Noark, for those who filed the version or for the manager(s) of the concerned administrative unit.	O2
K6.32	For document versions which are not the last one (<i>Active version</i> in the table <i>Version = 0</i>), the person who has filed the version in question, or the manager(s) of that person's administrative unit, should be able to specify a date for the deletion of the version (in the attribute <i>To be kept until date</i>). It should be possible to set such a date as long as the <i>Document status</i> is different from F . It should also be possible for the organization to define a default value for this attribute, specified as a time interval from the current date, cfr. the table <i>Default values and other configuration information</i> . It should be possible for the person who is authorized to set such a date, to exceed it. When the date has been reached, the system should automatically delete the concerned document version. Alternatively, this may be effectuated in one operation for several documents and versions, for instance once a month.	S1
K6.33	When the <i>Document status</i> is F , only specifically authorized persons should be able to delete document versions, cfr. ch. 8. There should be different authorizations for deleting the final version of a document and previous versions. All deletion of versions of documents which have the status F , should be logged.	O2

6.3 Process management as compared to SGK

The process management of Noark-4, as described in this chapter, is in the border area between recordkeeping functions and case handling functions. This is due to the need for a close and well-defined interaction between these functions for the case handling (processing) to be efficient, as well as the need for adequate quality control. The description in Noark aims at placing the recordkeeping process in its proper context, which necessitates the description of individual case handling functions. From a case handling point of view, functions and requirements have been described in SGK, where a number of cases have necessitated a similar description of recordkeeping functions for the sake of the context.

As mentioned, there are three main types of parties in the recordkeeping process: archivist, manager and executive officer. The last two are primarily associated with the case handling function, but in many organizations they will also be assigned tasks which concern the recordkeeping functions, such as registration, electronic filing and dispatch. Thus, the recordkeeping system must be able to respond to actions relating to recordkeeping carried out by managers and executive officers.

The above description often emphasizes that the tasks of managers and executive officers should preferably be performed in a case handling system which is integrated with the Noark system. This presupposes that the case handling system conforms to the SGK specifications. This integration should, among other things, guarantee the automated transfer and updating of information between the Noark and SGK functions as well as efficient information searching across functions from the locations of the different parties. The integration may be implemented by incorporating both types of functions in a common system, or by letting two systems be integrated with each other via a common interface (see ch. 17 concerning interfaces).

However, Noark-4 also provides for the maintenance of simple recordkeeping processing without integrating it with or in a complete case handling system as described in SGK. Even if this is a less satisfactory solution, it will still be possible to integrate Noark with a word processor and let all types of involved parties use the Noark process management directly.

6.4 Changes from Noark-3 and Koark

The concept of process management is not used in Noark-3 or Koark. Still, both describe, to a certain extent, processes, especially in connection with electronic document production (paragraph 10.2.1 in Noark-3 and paragraph 14.2 in Koark). However, the process management of Noark-4 is more comprehensive and implemented in a more systematic way than previously. The following changes have been made in attributes relating to process management:

Basic version (requirement type O):

- The attribute *Case status* is mainly used in the same way as in Koark. This represents an enhancement of the attribute *Case completed* in Noark-3.

Enhanced version (requirement type O1):

- The attribute *Registry status* replaces the *Document status* of Koark. The functionality has been enhanced. This attribute does not exist in Noark-3.

Electronic recordkeeping (requirement type O2):

- The attribute *Document status* in Noark-4 is new.