



7 APPENDIX B: DISPOSITION REPORTING INTEGRATION CONCEPTS WHITEPAPER



DISPOSITION REPORTING INTEGRATION CONCEPTS

In order to automate the reporting of disposition information in the State of Arizona, the entities involved in the effort must collectively work towards reporting information in a means that enables integration of this information. This paper will discuss the basic principles of criminal justice information integration, will outline the disposition reporting integration efforts to-date in Arizona, will highlight the integration requirements, and finally will offer recommendations to fulfill this need. It is the intent of this document to provide suggested solutions to address the integration requirement and to initiate further discussion to help Arizona reach a solution for automated disposition reporting.

Terms and Definitions

To understand the concepts introduced in this paper, it is important for the readers to have a common understanding of the terms utilized throughout the document. The following definitions should serve to frame the remainder of the document and to provide all readers with a common point of reference for understanding the sections that follow.

Criminal History Cycle

The criminal history cycle is the concept of an enterprise criminal justice case. It is typically comprised of arrest, prosecutor, court, and corrections segments that collectively represent all actions taken against a single criminal event.

Criminal History Segment

A criminal history segment refers to information within a specific element of the criminal history cycle, such as the arrest, prosecutor, court or corrections segment.

Complete

Complete information, as it pertains to criminal justice information, refers to obtaining all expected components or segments of a cycle. The ability for criminal justice agencies to make correct decisions at any point in the criminal justice process relies heavily on access to this complete information.

Accurate



Accuracy refers to ensuring that all of the information that is part of the criminal cycle is correct. An accurate record correctly depicts the actions that have occurred for each charge within the cycle, and presents a common picture, void of interpretations, such as trying to match the dispositions against the initial charges.

Timely

The concept of timely has two distinct meanings. It refers to the ability for decision makers to have access to information when, where, and how they need it. It also refers to ensuring that information is made available as soon as possible after an event has occurred.

Initiation of Charges

The term initiation of charges is intended to be a laymen's term that refers to any place in the cycle in which charges are captured against the cycle, including the arrest segment charges, prosecutor charges, and court charges.

Introduction

One of the most significant barriers to the attainment of complete, accurate, and timely information is the lack of standards for sharing this information. The collection of information that makes up the criminal disposition data comes from a variety of sources, and typically from very disparate systems. Each of these systems is appropriately designed to track and maintain data that is important to the specific agency's business requirements, utilizing their own constructs to track person, case and charge information. Therefore, when one begins talking about integrating that data into a common set of information, each agency has a different idea of how to link that information together, thus inhibiting the ability to share information. To achieve the linkages required, concepts of common tracking numbers must be understood and implemented, independent of any one particular agency's business processes or application set.

The sections that follow will provide some information on integration principles and a background of integration efforts to date with respect to the reporting of disposition information in Arizona, as well as further explaining the requirements for integration in this reporting area and defining a solution to meet those requirements.



Integration Principles

The issue of how to integrate criminal justice information is certainly not unique to the State of Arizona. National organizations, such as SEARCH have published guiding principles to help State and Local agencies with their own integration efforts. Included in these recommendations is the establishment and articulation of integration principles. These principles of integration, as published by SEARCH in April of 2000¹ are as follows:

- ◆ Data should be captured at the origination point, rather than attempting to reconstruct it later.
- ◆ Data should be captured once and used many times, accomplishing both leverage of existing resources and improved data quality.
- ◆ Integrated systems should be driven by the operational systems of the participating agencies, not in a vacuum.
- ◆ Capabilities to accomplish generalized automatic query, push, pull, publish and subscription must be part of the system.

To achieve integrated justice, the systems that track and maintain justice information must be able to provide both complete and accurate information to the criminal justice community and authorized civil users in a timely manner. Without this ability to share information, decision-makers are forced to make their decisions with incomplete, if not inaccurate information.

Arizona Disposition Reporting Integration Efforts

In March of 1996, the Arizona Criminal Justice Commission (ACJC) contracted with IBM to conduct a Tracking System Feasibility Study. The purpose of the study was to provide ACJC with a recommended solution for the implementation of a unique offense identifier number that would be utilized to track all fingerprint-based incidents that make up the State's criminal history records. This study was completed in August 1996. The two recommendations from this study that have the greatest impact on the current disposition reporting integration efforts include the following:

- ◆ The recommendation to adopt the AZAFIS Process Control Number (PCN) as this unique tracking number,

¹ *Integration in the Context of Justice Information Systems: A Common Understanding*, SEARCH (The National Consortium for Justice Information and Statistics), April 2000.



- ◆ The recommendation to share the PCN throughout the criminal justice community for the communication of events related to the criminal cycle.

Recognizing the critical role that a common identification number for the tracking of criminal cycle information throughout the adjudication and disposition process was certainly forward thinking, and this concept remains an essential piece in the success of integration efforts in Arizona. Establishment of this tracking number at the time the cycle begins is also an important aspect to achieving integration. Believing that the PCN could accomplish this level of tracking, the ACJC adopted the PCN as the official cycle tracking number, and legislation was passed to support the requirement for submission of this number with all segments reported to the ACCH (ARS 41-1750C). According to the ACJC Criminal Justice Records Improvement Plan, published in March 2004, many agencies are still working towards the implementation of the PCN within their systems.

In March 2002, IBM prepared another study for the ACJC. This study is referred to as the *Arizona ICJIS Strategic Plan*. It recommends a strategy for the integration of criminal justice agencies' information systems, targets disposition reporting as the "seed and business driver for the integration of justice in the State." This study is the driving force behind the Disposition Reporting Management conceptual design effort.

Integration Requirements

As mentioned above, the Arizona Process Control Number (PCN) was adopted in an effort to be the first step to matching data from the various sources. Because all criminal history information in Arizona must be supported by fingerprints, and because the PCN is generated at the point of fingerprinting, utilization of this number as the cycle identification number seemed like the best solution for the sharing of information. This approach makes two assumptions regarding the business processes associated with criminal records processing:

- ◆ The initiation of retainable charges will result in a custodial arrest.
- ◆ A one-to-one relationship exists between the criminal cycle and the fingerprinting event.

A closer look at actual business processes, however, shows that these assumptions fail to represent all possible charge scenarios. In



addition to a custodial arrest, charges can be initiated by non-arrest events. Below are some facts of criminal records processing:

- ◆ In order to communicate the “event” that initiated charges to the agencies that need to contribute information pertaining to that event, and have a common reference point for that event, the need to begin tracking criminal information begins at the initiation of charges.
- ◆ Failure to begin tracking information at the initiation of charges leads to missed opportunity to capture that information, and ultimately to incomplete records (as echoed in one of the SEARCH principles of integration),
- ◆ A single criminal cycle may include fingerprinting at several points within the process, such as at the time a warrant is served, at the booking for the offenses charged and served by the warrant, upon placement in a correctional facility, etc,
- ◆ No agency-specific identification number, be that the Transaction Control Number (being used by AZAFIS as the PCN field), the OCA, the Docket Number, a case number, or others is a global enough number to be utilized as the criminal cycle identification number. Truly a new number must be assigned independently of any system that is designed to contribute only a part of the entire criminal history picture.

In order to fulfill the integration requirements of ensuring complete, accurate, and timely information, the need for tracking begins at the initiation of charges, wherever that initiation may occur, and the tracking number for the cycle must be established at that time to provide a conduit for receipt of future information. The current practice of utilization of an AFIS or fingerprinting transaction control number as the cycle tracking number leads to the following problems:

- ◆ Missed opportunities to collect information. If the information is not collected at the time it occurs, another opportunity to input that information often does not exist, and the ability to determine how to report that information is greatly impeded.
- ◆ Inability to prevent more than one cycle number from being generated for a single criminal cycle. The most obvious of this is when a person is picked up on a warrant and printed, and then is printed again at the time of booking for the original charges. These events appear in criminal records as being two separate cycles when really they are a single cycle with two separate biometric identification events. This happens in the current process because each event includes fingerprinting. Due to the



current practice of utilizing the AFIS Transaction Control Number as the PCN, each event must receive its own PCN and is thus “misrepresented” as its own cycle.

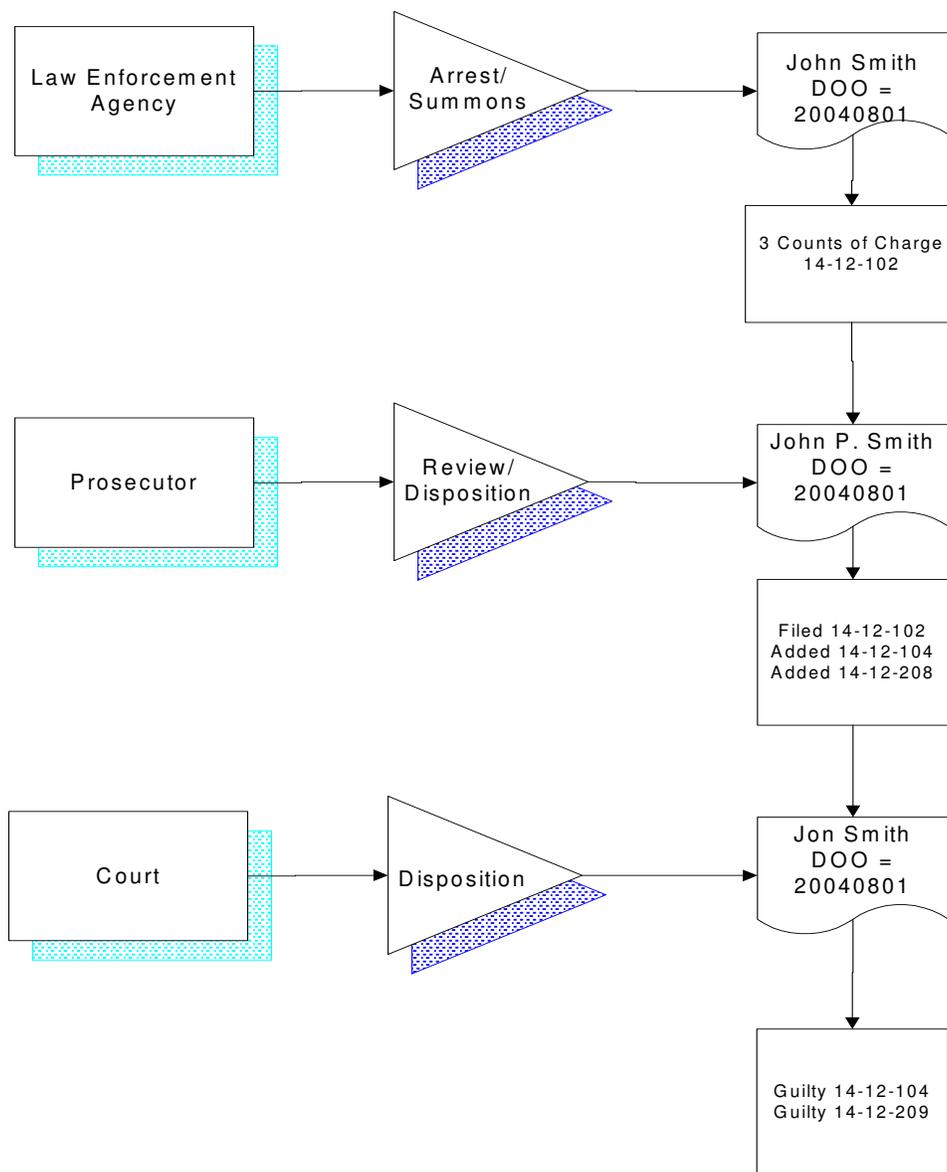
- ◆ Inability to communicate information about a criminal event with authorized agencies until the fingerprinting event has occurred.

Utilization of a criminal cycle tracking number that is established at the initiation of charges is only the first step in integration. In order to fulfill its role of providing accurate information, criminal information must be tracked at a lower level of detail than the cycle. To insure that prosecutor and court actions are recorded against the proper charges, tracking must be taken to the charge level. Since many arrests result in multiple police charges, and since initial police charges may be modified or augmented at later stages of the case (for example, after prosecutor review, grand jury action or plea bargaining), it is common for repositories to receive court dispositions that do not match the charges initially reported. Without the ability to track the information at the charge level, a complete record can never be guaranteed, or achieved.

The diagram that follows is typical of the information exchanges between agencies when cycle and charge tracking is not utilized.



DISPOSITION REPORTING MANAGEMENT – CONCEPTUAL DESIGN DOCUMENT



In this type of model, the agencies that receive the information cannot gain a good picture of the actions that preceded their own actions. For example, what happened to the other two counts of charge 14-12-102? How does a court disposition like this even make sense given the arrest and prosecuting charge decisions? Just as importantly, how can the prosecuting agency know without a doubt that the person that is the subject of their disposition is the same as the arrested person when no common means is provided for establishment of the cycle



outside of subjective names and possibly other identification numbers, such as date of birth or social security number?

In order for the DRM to be the “seed” for integration, and to accurately and completely manage and track the reporting of disposition information, it must meet the following integration requirements:

- Utilization of a criminal cycle tracking number
- Ability to track cycles at the charge level
- Ability to guarantee that the charge tracking number and its associated criminal charge remain consistent and unchanged throughout the criminal cycle

Recommended Solutions

The concepts that Northrop Grumman has found to be an effective means to meet the integration requirements and thus make the appropriate associations of data include the following:

- Establishment of a Criminal Cycle Tracking Number or Identifier – Criminal Cycle Identifier or CCID
- Establishment of Charge Tracking Numbers

Each of these concepts is explained in the sections that follow.

Criminal Cycle Tracking

The criminal cycle is the concept of an enterprise criminal justice case. This cycle is perhaps one of the most important and least understood notions in the criminal justice enterprise and the integration of its data. As a business concept, the criminal cycle is composed of arrest, prosecutor, court, corrections and probation information. These elements of the cycle are often referred to as the criminal cycle segments. The criminal cycle is initiated when charges are associated to an individual regarding an identified event. Common means that are used by Arizona criminal justice agencies to initiate a case are Cite and Release, arrest reports, summons, and grand jury indictments.

While being able to refer to a criminal cycle with a single identifying number or key is crucial to communication regarding that cycle, several of the current systems in a typical criminal justice enterprise are not constructed to store or communicate this common criminal



cycle identification number. Each agency has its own case or cycle identifying practice and set of identification numbers; for example, AFIS systems use transaction control number (TCN), law enforcement record management systems use originating case agency number (OCA), prosecutors have case numbers, and courts use docket numbers. Northrop Grumman has found that the only means to associate exchanges relating to these disparate tracking identification numbers is through linking them utilizing the criminal cycle concept. In the State of Arizona, inroads have already been taken at this level, to adopt and statutorily require that the PCN be the number that identifies the criminal cycle. The problem with this approach is that the PCN, in practice, is no different than a law enforcement case number or a court docket number. The PCN is the number that uniquely identifies a fingerprinting event. When more than one such event occurs within a single cycle, the PCN loses its ability to be a global enough tracking number to accurately represent the cycle.

In order to accomplish true cycle-level tracking for the achievement of complete and accurate disposition reporting, the following actions must be taken.

- Arizona must either expand the visibility and utility of the PCN so that it no longer represents the fingerprinting event, but rather the event that initiates charges or adopt a new number to accomplish this purpose of a globally accepted criminal cycle identification number.
- Every system in Arizona that utilizes the current PCN will need to be analyzed to determine the system's interpretation of that number.
- Any systems that interpret the PCN as the unique identifier of the fingerprinting event will need to be modified to accommodate a more global interpretation of a cycle tracking number. For example, the AZAFIS would need to make an alternative field in the NIST string available to communicate a true cycle tracking number, returning the definition of the current field that holds the PCN (1.09) back to its original designation (i.e., a Transaction Control Number or TCN).

The effort that is currently underway in Maricopa County with respect to use of the Common Case Number is very much the same type of concept that Northrop Grumman advocates as imperative to



accurate and complete reporting. This type of tracking must either precede or coincide with the implementation of the next level of tracking, the charge tracking mechanism.

Charge Tracking

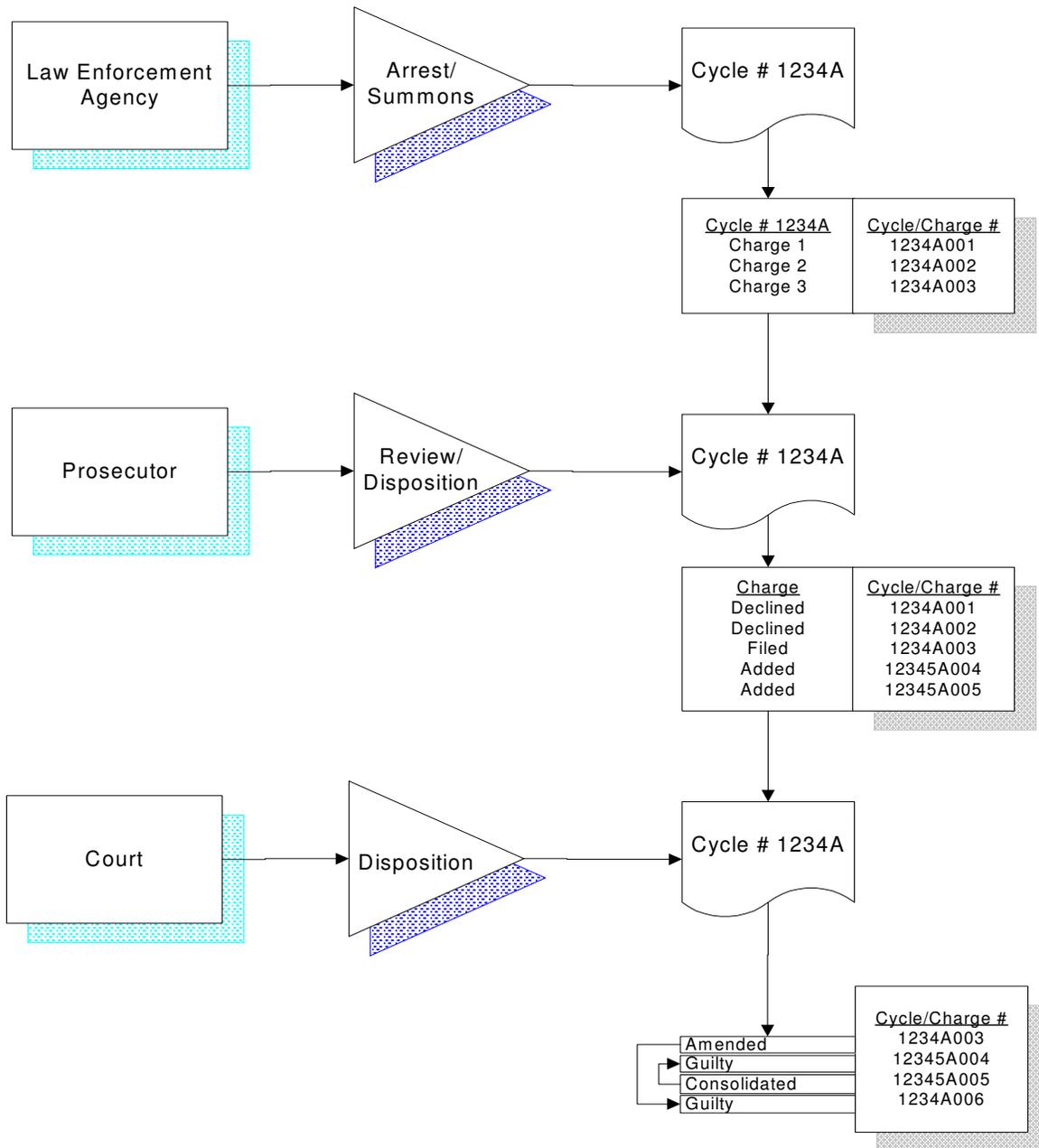
As mentioned above in the integration requirements section, the utilization of a cycle tracking number can only guarantee that criminal information is associated with the right criminal cycle. The cycle tracking number cannot in and of itself provide the basis for completeness of information. Completeness can only be achieved through reliably associating particular dispositions with particular charges and counts within a particular cycle. Since many arrests result in multiple charges, and since initial police charges may be modified or augmented at later stages of the case (for example, after prosecutor review, grand jury action or plea bargaining), it is imperative that a mechanism is available for linking charges at all segments of the cycle.

The mechanism that successfully addresses this requirement is implementation of a Charge Tracking Number (CTN). Under this approach, each charge in a particular cycle is assigned a number (001, 002, 003, for example). This additional number, in combination with the tracking number for the cycle, is used in all subsequent data exchanges. If, for example, a charge is dropped or modified by the prosecutor, this action is reported to the DRM with the specific cycle tracking number and CTN. This type of communication allows the DRM to track the charge from initiation and to accurately depict what has happened to the charge as the cycle has progressed through the process. If the prosecutor or a grand jury adds new charges, these charges are assigned new numbers and the information is reported to the court. Court disposition information is then reported by both the cycle tracking number and the charge tracking number (CTN), and a disposition can thus be reported and recorded for each charge. This enables the DRM to account for each charge in the criminal cycle, and eliminates a primary source of uncertainty common in information exchange.

The illustration that follows is another depiction of the progression of a cycle, as shown above. However, this time, it incorporates the use of cycle and charge tracking numbers.



DISPOSITION REPORTING MANAGEMENT – CONCEPTUAL DESIGN DOCUMENT



Without the ability to know that the prosecutor declined charges 001 and 002 and added charges 004 and 005, and the ability to know that the court amended charge 003 to be now 006, the possibility for anyone to interpret the data and know the outcomes for each charge



would be lost. Utilization of the combination of the cycle tracking number and CTN provides the following benefits:

- Ability to track charges within cycles from initiation to final disposition
- Ability to provide accurate and complete dispositions, and to know when all expected dispositions have been received
- Ability to track transformation of the charges as they progress through the system

As demonstrated in the diagram above, the combination of a cycle and charge tracking number scheme can provide the clarity and precision necessary to accurately and completely record criminal charge information. Without these critical pieces of information, the ability to track the progression of a cycle throughout the process would be impossible, and would also make impossible the ability to confidently achieve accuracy and completeness in reporting. Equally as critical to this effort is the expansion of the Process Control Number or adoption of a new number to fulfill the requirement of a true, global cycle tracking number, rather than its current dual implementation as a limited cycle tracking number and an AFIS transaction control number.