



Avoiding the Interface Trap

CAD/RMS Contract Strategies That Protect Your Agency

Introduction

When agencies negotiate CAD and RMS contracts, it's easy to get caught up in the bells and whistles: dashboards, incident types, analytics modules. But the true operational value—and the greatest risk of failure—lies in the interfaces.

Poorly defined or undocumented interfaces lead to deployment delays, functionality gaps, and costly change orders.

Why Interfaces Matter

Interfaces are the arteries of your CAD/RMS ecosystem. They govern how systems communicate in real time with mobile apps, radios, AVL platforms, RTCCs, and evidence tools. Without clearly defined functionality and technical behavior, your agency could be left with manual workarounds, disconnected workflows, and degraded performance.

The Solution: IRD and IFD

Every interface should be backed by two foundational documents:

- **IRD (Interface Requirements Document):** Defines the systems being connected, the data exchanged, frequency, and format (e.g., NIEM XML, JSON).
- **IFD (Interface Functionality Description):** Describes how the interface behaves, what triggers it, how errors are handled, and what the user should expect.

📌 These must be **tied to deployment milestones and payment schedules** to ensure delivery and accountability.

Understanding Real-Time vs. RDW

Not all integrations are created equal.



- **Real-Time Interfaces** power operations. They push or pull data instantly—like live AVL updates, dispatch notes syncing to mobile apps, or two-way incident status changes.
- **RDW (Reporting Data Warehouse) Feeds** are designed for analytics. They're batch-based, one-way data streams. Some vendors update every 45 seconds; others only once per hour.

If an "interface" pulls from an RDW, it's not an interface—it's a **data feed**.

This difference matters. Your contract must define:

- Data latency thresholds
- Frequency of refresh
- What triggers a data sync
- What happens if the feed fails

Interface Examples That Require Clarity

✓ **SmartLocate (APX NEXT Radios):**

Is location updated live from radios or delayed via polling?

✓ **Tablet Command Integration:**

Does it allow responders to update incidents or is it read-only?

✓ **eCitation Integration:**

Is the citation auto-linked to the CAD/RMS record, or handled later?

✓ **Heatmaps and Crime Analysis Tools:**

Do these reflect real-time calls, or last night's data?

✓ **Auto-Tagging with Body/Dash Cams:**

Are videos auto-associated with case numbers, or manually matched?

✓ **Third-Party Evidence Interfaces:**

Can digital forensics, LPR hits, or citizen video feeds be automatically ingested with full chain-of-custody support—or are they siloed?



The Vendor Bait-and-Switch

It often looks like this:

1. **Pre-Sale:** “Yes, we support that integration.”
2. **Contract:** A vague line item mentions the interface.
3. **Deployment:** Vendor reveals limits, delays, or missing functionality.
4. **Response:** “That requires a change order.”

You lose leverage, budget, and time.

Who Should Be at the Table

Agencies need a **project lead or consultant** who:

- Knows CAD/RMS systems
- Can translate ops needs into IRD/IFD specs
- Pushes back on vague contract language
- Ties real deliverables to milestone payments

This one move can prevent six-figure change orders and deployment gridlock.

Conclusion

Interfaces are not optional.

They are the backbone of modern public safety systems.

Define them clearly.

Validate them thoroughly.

And defend them contractually.