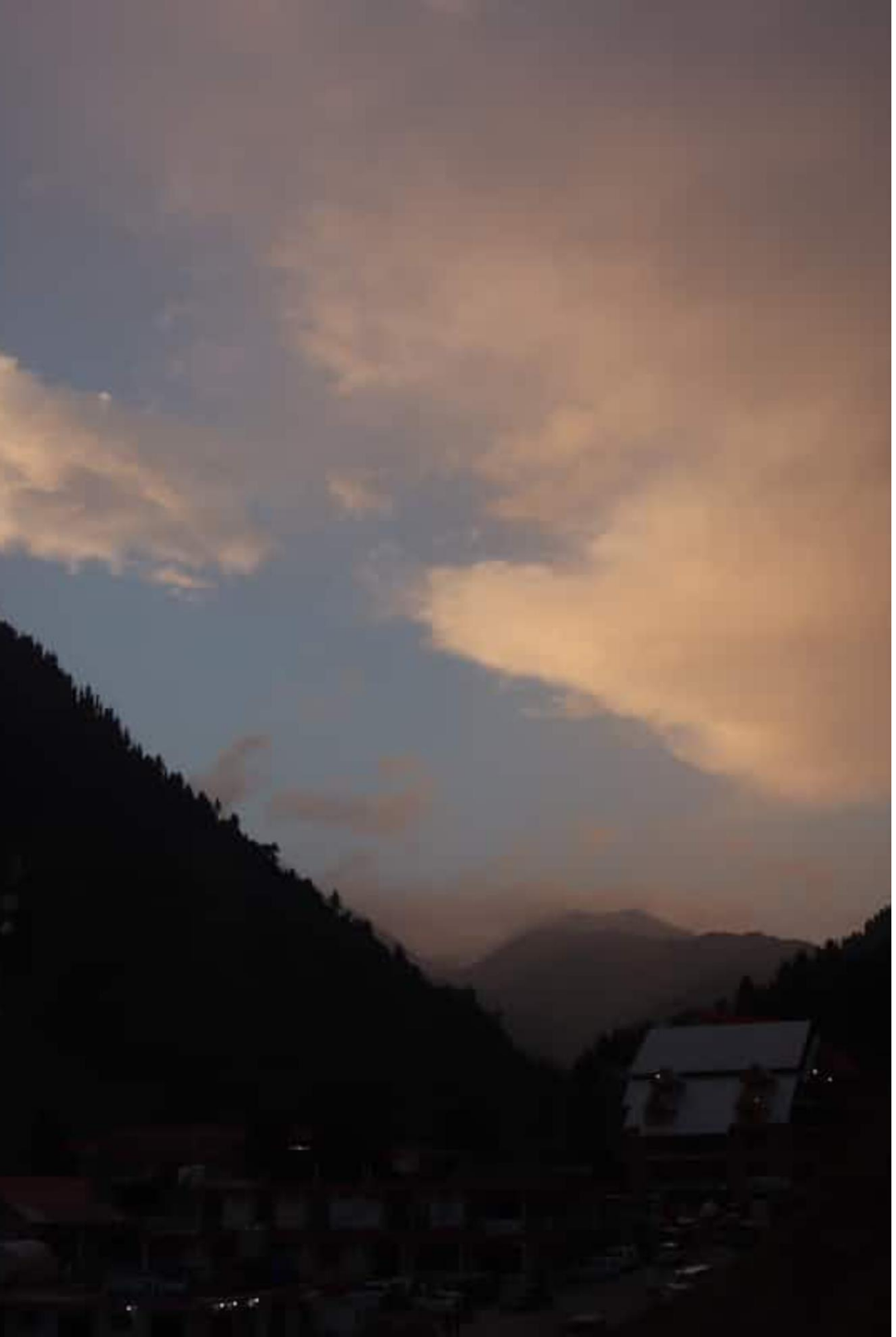

Weather Decision-Making & Communication Toolbox

A comprehensive framework for decision-makers, communications teams, and operational stewards responsible for weather-related safety and response at outdoor events. This toolbox enables fast, justified, and traceable decisions whilst ensuring coherent communications before, during, and after adverse weather events.

Author: Pascal Viot

Purpose & Strategic Scope

Our Core Purpose

This framework enables rapid, justified, and fully traceable decision-making alongside coherent communications before, during, and after adverse weather events. We address four critical hazards: wind, lightning, heavy rain and flooding, and extreme heat.

The system provides decision-makers with clear escalation pathways, communications teams with ready-to-deploy templates, and operational stewards with actionable protocols. Every decision point is documented, every communication channel is redundant, and every stakeholder knows their role.

System Interfaces

This decision-making framework connects seamlessly with three other critical systems: Monitoring & Early Warning (nowcasting and provider briefings), On-site Implementation (operational measures), and Documentation & Learning (logs and after-action reviews). It aligns precisely with Preparedness Levels (Green/Yellow/Orange/Red) and staging protocols (A1–A4/C1–C4).

1

Monitor

Nowcasting & provider briefings

2

Decide

Escalation & communication

3

Implement

On-site operational measures

4

Document

Logs & after-action reviews

System Components Overview

Six integrated tools provide comprehensive decision-making and communication support across all weather scenarios. Each component serves a specific function whilst connecting seamlessly with the others to create a robust safety system.

Escalation Flowcharts

Hazard-specific decision trees for lightning, wind, rain and flooding, and heat, plus cross-hazard stop and restart protocols

Threshold & Trigger Log

Master table linking parameters to thresholds, agreed actions, responsible owners, and pre-approved communication texts

Role Clarity Cards

Pocket-friendly A6 cards defining who decides, communicates, monitors, executes, and logs during weather events

Communication Plan

Multi-channel strategy with templates for all audiences, phases, and emergency scenarios in multiple languages

Stakeholder Coordination

Protocols for authorities, emergency services, contractors, crew, and artists with notification forms and contact matrices

Timeline & Mindmap

Visual planning tools showing decision points from T-120 through event to post-action, with communication rhythm overlay

Alert & Crisis Levels: A Unified Framework

1

A1

Green (Routine) Normal operations with active monitoring of long-range forecasts. No immediate threat.

Primary Focus: Proactive planning, resource readiness.

2

A2

Yellow (Vigilance) Potential for adverse weather within 24-48 hours. Increased monitoring and pre-emptive checks initiated.

Primary Focus: Information gathering, pre-deployment of assets.

3

A3

Orange (Readiness) Likely adverse weather impact within 12-24 hours. Pre-approved actions triggered, teams on standby.

Primary Focus: Final checks, communication prep, stakeholder alerts.

4

A4

Red (Imminent) Adverse weather imminent or already impacting. Critical decisions and immediate actions required.

Primary Focus: Execute protocols, activate crisis comms, ensure safety.

1

C1

Crisis (Minor) Localised incident with minimal disruption. Managed by on-site teams.

Primary Focus: Containment, rapid recovery, localised communication.

2

C2

Crisis (Significant) Broader incident affecting multiple areas. Coordinated response involving internal stakeholders.

Primary Focus: Impact assessment, coordinated response, regular updates.

3

C3

Crisis (Major) Widespread severe incident requiring external emergency services support.

Primary Focus: Life safety, official reporting, multi-agency coordination.

4

C4

Crisis (Catastrophic) Extreme, prolonged, or widespread event with severe consequences. Full crisis management activation.

Primary Focus: Long-term recovery, strategic decisions, public liaison.

This framework defines clear Alert (A1-A4) and Crisis (C1-C4) levels, ensuring a consistent and coordinated response to evolving weather scenarios. Each level dictates specific operational procedures, communication strategies, and resource allocations.

This tiered system ensures that responses are proportionate to the threat, allowing for efficient resource management and clear lines of action during dynamic weather events.

Escalation Flowcharts: Hazard-Specific Decision Trees

Every hazard follows a proven decision pattern: Detect → Evaluate → Decide → Communicate → Execute → Log → Review. This consistent approach ensures clarity under pressure whilst allowing hazard-specific customisation.

Lightning & Thunderstorm

Inputs: Cell distance (km), ETA (minutes), lightning density, outflow/gust front risk

Triggers: A2 (>20' likely), A3 (<20' strong), A4 (<20' very strong)

Actions: Halt starts, de-energise stage, issue sheltering instructions, restrict metal structures, prepare ShowStop

Restart: All-clear after X minutes since last strike within Y km; technical and crowd checks complete

Wind & Gusts

Inputs: On-site anemometer readings, forecast gusts (m/s or km/h), structure vulnerability assessments

Triggers: A2 (≥50 km/h in >20'), A4 (≥80 km/h in <20') — customised to structures

Actions: De-rig light elements, open backdrops, lower LED screens, secure signage, restrict tower access, Stop if integrity compromised

Rain & Flash Flooding

Inputs: Intensity (mm/h), duration, catchment/run-off analysis, ground saturation, drainage capacity

Triggers: Thresholds for prolonged intensity, campsite or parking waterlogging indicators

Actions: Divert flows, close/redirect parking, deploy absorbents, adjust egress routes, communicate safe passage

Extreme Heat

Inputs: WBGT/Heat index, solar radiation, wind speed, vulnerable group identification

Triggers: Step-up hydration/shade requirements, work/rest cycle adjustments, show timing modifications

Actions: Public health communications, free water points, misting stations, shade activations, crew rotation adaptations

Stop, Pause & Restart Protocol

A unified protocol governs all Stop, Pause, and Restart decisions regardless of the triggering hazard. This ensures consistency and prevents confusion when multiple weather threats emerge simultaneously.

Stop or Pause Criteria

- Lightning proximity within critical threshold
- Wind gusts exceeding structural safety limits
- Compromised structural integrity of any kind
- Visibility below minimum safe levels
- Hail presenting injury risk to crowd or crew

Restart Criteria (All Must Be Met)

- Technical systems checked and confirmed operational
- Medical team confirms no outstanding incidents
- Crowd flow assessment shows safe conditions
- Official All-clear message issued and logged
- Read-back confirmation received from all zones
- Staged restart sequence: front-of-house first, then stage

Threshold & Trigger Log: Single Source of Truth

This master table eliminates ambiguity by linking every measurable parameter to a specific threshold, pre-agreed action, responsible owner, communication text, and deadline. It serves as the single source of truth during fast-moving weather events, ensuring everyone knows exactly what happens when.

Hazard	Parameter	Threshold	Level	Pre-Agreed Action	Owner	Communication Text
Wind	Gusts (km/h)	≥50 in >20'	A2	Lower LED, open backdrops, secure banners	Production	"High wind expected. Securing elements."
Lightning	Cell distance	<10 km, ETA <20'	A3	Prepare Stop, activate sheltering protocol	Coord. Security	"Thunderstorm approaching. Move to shelters."
Rain	Intensity	>20 mm/h ≥30' + pooling	C1	Close Parking East; divert traffic to Route Y	Transport	"Parking East closed. Follow route Y."
Heat	WBGT	≥28°C	A2	Increase water distribution, open shade, adjust crew rotation	Health & Safety	"Stay hydrated. Shade areas open."

Additional logs track authority notifications and artist/management communications. All entries include timestamps, deadlines (in minutes from trigger), and designated communication channels (radio, PA, screens, app, social media).

Role Clarity: Who Does What

Confusion about roles creates dangerous delays during weather emergencies. These pocket-friendly A6 cards eliminate ambiguity by clearly defining five critical functions. Each card is colour-coded and designed for rapid reference under pressure.

DECIDE

Who: Coordination Security / Director of Operations

What: Makes all Stop, Pause, Go, and Restart decisions based on threshold triggers and situational assessment

COMMUNICATE

Who: Centrale / Communications Team

What: Deploys SMS alerts, radio all-calls, authority notifications, PA announcements, screen messages, and app pushes

MONITOR

Who: Weather Monitoring Unit / Provider / Centrale

What: Tracks nowcasts, radar imagery, on-site sensors, and provides continuous updates to decision-makers

EXECUTE

Who: Constructions / Production / Security

What: Implements rigging changes, manages barriers, routes crowds, executes closures, and confirms completion

LOG

Who: Designated Scribe

What: Maintains Decision & Communications Log with timestamps, read-backs, screenshots, and audio recordings

Print-ready PDF includes crop marks for A6 double-sided cards. Editable DOCX templates allow customisation for specific events whilst maintaining the proven structure.

Multi-Channel Communication Strategy

Audience Strategies

Public: Safety and comfort messaging, shelter and water locations, calm tone, multi-language delivery (French/English plus local languages)

Staff/Crew/Stewards: Concise tasking instructions, minimal code words, mandatory check-backs for confirmation

Artists/Management: Status updates, timing changes, stage safety assessments, restart windows

Vendors/Contractors: Rigging safety alerts, stock protection requirements, stand closure instructions

Authorities/Emergency Services: Concise situation reports, decision summaries, resource requests

Redundancy & Accessibility

- **Redundancy:** Communication strategy engineered for no single point of failure, deploying messages simultaneously and in cascade across PA systems, dynamic screens, app push notifications, secure messaging (SMS/WhatsApp/Signal), and dedicated radio networks.
- **Backup Systems:** Satellite phones and physical messengers are on standby to ensure communication flow even if primary infrastructures are compromised.
- **Technical Fortifications:** Autonomous power supplies for vital equipment and automatic failover protocols are in place to ensure uninterrupted communication.
- **Accessibility for All:** Universal pictograms are integrated for clear understanding across diverse audiences.
- **Hearing Impaired Support:** Crystal-clear audio announcements are supplemented with large, high-contrast text on screens, and flashing visual alerts for the deaf.
- **Language Simplicity:** Messages use simple language to ensure rapid and universal comprehension.

1

Pre-Alert (A1)

Public: "Weather risk later today. Stay informed."

Crew: "Brief at 11:00. Review wind actions."

2

Pre-Action (A2)

Public: "Strong wind expected. Please avoid light structures."

Crew: "Secure banners; lower LED by 20'."

3

Action (A3/A4)

Public: "Thunderstorm approaching. Programme paused. Move calmly to shelters."

Crew: "Implement Stop. Confirm zone status."

4

Post-Action (C1–C4)

Public: "Parking East closed. Follow signage to Route Y."

Crew: "Activate rain plan; deploy straw at Gate 3."

5

Restart

Public: "All clear. Shows resume shortly. Thank you."

Crew: "Restart checks complete. Stand-by for cue."

Emergency Communications: Fast-emerging situations require template sets limited to 140–240 characters for first impact. Lead with the required action, include location cues, eliminate jargon, and promise time-bound updates. Deploy across SMS/WhatsApp/Signal, PA, and social media/app simultaneously.

Stakeholder Coordination & Implementation

Authority & Emergency Services

Pre-established protocols ensure rapid coordination with local authorities and emergency services. Notification forms follow standardised structures, situation report templates provide concise updates, and call trees include alternate contacts. Designated rendez-vous points are mapped and communicated in advance.

Contractors & Crew Coordination

Per-vendor checklists cover rigging, signage, LED screens, and temporary structures. Each contractor receives escalation contacts and knows their specific weather-related responsibilities. Crew briefings occur at 11:00 daily with ad-hoc updates as conditions evolve.

Artist & Management Protocols

Clear stop and restart decision pathways prevent confusion. Safe-holding locations are identified and communicated. Communication windows ensure artists and agents receive timely updates without overwhelming them during high-pressure situations.

Implementation Checklist

- ❑ Escalation flowcharts validated with meteorological partner
- ❑ Thresholds agreed with structures, engineering, and Health & Safety teams
- ❑ Contact matrices current and tested through call tree drills
- ❑ PA systems, screens, and app tested; templates uploaded; languages reviewed
- ❑ Role clarity cards printed and distributed to all relevant personnel
- ❑ Scribe log templates prepared; archiving workflow established
- ❑ Briefing calendar confirmed (11:00 daily, plus ad-hoc as required)
- ❑ Authority notification forms completed and approved
- ❑ Training videos distributed to all decision-makers and communications staff
- ❑ Integration with Safety Advisory Group confirmed


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