

1 (2) ILLEGAL CHILD MARRIAGE.—The term “il-
2 legal child marriage” means a child marriage that is
3 illegal under the laws of the country in which the
4 child marriage occurs.

5 **TITLE V—GLOBAL FRAGILITY**

6 **SEC. 501. SHORT TITLE.**

7 This title may be cited as the “Global Fragility Act
8 of 2019”.

9 **SEC. 502. APPROPRIATE CONGRESSIONAL COMMITTEES**

10 **DEFINED.**

11 In this title:

12 (1) APPROPRIATE CONGRESSIONAL COMMIT-
13 TEES.—The term “appropriate congressional com-
14 mittees” means—

15 (A) the Committee on Foreign Relations
16 and the Committee on Appropriations of the
17 Senate; and

18 (B) the Committee on Foreign Affairs and
19 the Committee on Appropriations of the House
20 of Representatives.

21 (2) RELEVANT FEDERAL DEPARTMENT OR
22 AGENCY.—The term “relevant Federal department
23 or agency” means the Department of State, the
24 United States Agency for International Develop-
25 ment, the Department of Defense, the Department

1 of Treasury, and any other Federal department or
2 agency the President determines is relevant to carry
3 out the purposes of this title.

4 **SEC. 503. STATEMENT OF POLICY.**

5 It is the policy of the United States to seek to sta-
6 bilize conflict-affected areas and prevent violence and fra-
7 gility globally, including by—

8 (1) ensuring that all relevant Federal depart-
9 ments and agencies coordinate to achieve coherent,
10 long-term goals for programs designed to carry out
11 such policy;

12 (2) seeking to improve global, regional, and
13 local coordination of relevant international and mul-
14 tilateral development and donor organizations re-
15 garding efforts to carry out such policy; and

16 (3) enhancing the effectiveness of United States
17 foreign assistance programs and activities to carry
18 out such policy, including by improving assessment,
19 monitoring, and evaluation conducted by the rel-
20 evant Federal departments and agencies.

21 **SEC. 504. GLOBAL FRAGILITY STRATEGY.**

22 (a) STRATEGY.—The President, in coordination with
23 the Secretary of State, the Administrator of the United
24 States Agency for International Development (“USAID”),
25 the Secretary of Defense, and the heads of other relevant

1 Federal departments and agencies, shall establish a com-
2 prehensive, integrated, ten-year strategy, to be referred to
3 as the “Global Fragility Strategy”, to contribute to the
4 stabilization of conflict-affected areas, address global fra-
5 gility, and strengthen the capacity of the United States
6 to be an effective leader of international efforts to prevent
7 extremism and violent conflict. The strategy shall focus
8 on addressing long-term causes of fragility and violence,
9 and shall—

10 (1) consider the causes of fragility and violence
11 at both the local and national levels, the external ac-
12 tors that reinforce and exploit such conditions, and
13 successful prevention strategies and their key fea-
14 tures;

15 (2) include specific objectives and multisectoral
16 approaches to reduce fragility and the causes of vio-
17 lence, including those that strengthen state-society
18 relations, curb extremist ideology, and make society
19 less vulnerable to the spread of extremism and vio-
20 lence;

21 (3) encourage and empower local and national
22 actors to address the concerns of their citizens, in-
23 cluding those in vulnerable communities, and build
24 community resilience against violence and extre-
25 mism;

1 (4) address the long-term underlying causes of
2 fragility and violence through participatory, locally
3 led programs, empowering marginalized groups such
4 as youth and women, inclusive dialogues and conflict
5 resolutions processes, justice sector reform, good
6 governance, inclusive and accountable service deliv-
7 ery, and community policing and civilian security, in-
8 cluding by combatting impunity for security forces
9 implicated in violations of internationally recognized
10 human rights and other serious crimes;

11 (5) describe approaches that ensure national
12 leadership where appropriate and participatory en-
13 gagement by civil society and local partners in the
14 design, implementation, and monitoring of pro-
15 grams;

16 (6) assign roles for relevant Federal depart-
17 ments and agencies to avoid duplication of efforts,
18 while ensuring that—

19 (A) the Department of State is responsible
20 for leading the drafting and execution of the
21 strategy, establishing United States foreign pol-
22 icy, advancing diplomatic and political efforts,
23 and overseeing the planning and implementa-
24 tion of security assistance and related civilian
25 security efforts;

1 (B) USAID is responsible for overseeing
2 prevention programs, and is the lead imple-
3 menting agency for development, humanitarian,
4 and related non-security program policy;

5 (C) activities undertaken or supported by
6 the Department of Defense in relation to the
7 Global Fragility Strategy are established
8 through joint formulation and with the concur-
9 rence of the Secretary of State; and

10 (D) other relevant Federal departments
11 and agencies support the activities of the De-
12 partment of State and USAID as appropriate,
13 with the concurrence of the Secretary of State
14 and the Administrator of the United States
15 Agency for International Development;

16 (7) describe programs that relevant Federal de-
17 partments and agencies will undertake to achieve the
18 stated objectives, including descriptions of existing
19 programs and funding by fiscal year and account;

20 (8) identify mechanisms to improve coordina-
21 tion between the United States, foreign govern-
22 ments, and international organizations, including the
23 World Bank, the United Nations, regional organiza-
24 tions, and private sector organizations;

1 (9) address efforts to expand public-private
2 partnerships and leverage private sector resources;

3 (10) describe the criteria, metrics, and mecha-
4 nisms for monitoring and evaluation of programs
5 and objectives in the strategy to ensure planning,
6 implementation, and coordination are appropriately
7 executed and updated;

8 (11) describe how the strategy will ensure that
9 programs are country-led and context-specific; and

10 (12) identify mechanisms or activities to reduce
11 the risk that the programs, policies, or resources of
12 the United States and its partners will facilitate cor-
13 ruption, empower or abet repressive local actors, or
14 be exploited by extremists to gain support for their
15 cause.

16 (b) **STAKEHOLDER CONSULTATION.**—The Global
17 Fragility Strategy required under this section shall be de-
18 veloped in consultation with representatives of civil society
19 and national and local governance entities in countries and
20 regions described in section 505, as well as relevant inter-
21 national development organizations with experience imple-
22 menting programs in fragile states, multilateral organiza-
23 tions and donors, relevant private, academic, and philan-
24 thropic entities, and the appropriate congressional com-
25 mittees.

1 (c) REPORT.—Not later than 270 days after the date
2 of the enactment of this Act, the President shall submit
3 to the appropriate congressional committees a report set-
4 ting forth the strategy described in subsection (a), which
5 shall be submitted in unclassified form, but may include
6 a classified annex if necessary, and shall include, at a min-
7 imum, the following elements:

8 (1) The objectives, general and specific, of the
9 strategy.

10 (2) An identification of the relevant Federal de-
11 partments and agencies that will be involved and the
12 assignment of priorities to such departments and
13 agencies.

14 (3) A description of the compact-based partner-
15 ships that will be established to ensure local leader-
16 ship of strategies, policy, and programs, as well as
17 mutual accountability for results and resources need-
18 ed to support such partnerships.

19 (4) An identification of the authorities, staffing,
20 and other requirements, as necessary and appro-
21 priate, needed to effectively implement the Global
22 Fragility Strategy.

23 (5) A description of the ways in which United
24 States leadership will be used to enhance overall
25 international prevention efforts, including through

1 increasing the engagement of the member states of
2 the Group of Seven and Group of Twenty.

3 (6) An identification of which officials of the
4 Department of State, USAID, and the Department
5 of Defense, with a rank not lower than Assistant
6 Secretary or Assistant Administrator, will be respon-
7 sible for leading and overseeing the strategy.

8 (7) A list of priority countries and regions se-
9 lected pursuant to section 505, including descrip-
10 tions of the rationale for such selections.

11 **SEC. 505. SELECTION OF PRIORITY COUNTRIES AND RE-**
12 **GIONS.**

13 (a) **IN GENERAL.**—The President, in coordination
14 with the Secretary of State, the Administrator of the
15 United States Agency for International Development, and
16 the Secretary of Defense, and in consultation with the ap-
17 propriate congressional committees specified in subsection
18 (b), shall select certain countries as “priority countries”
19 and certain regions as “priority regions” for the purpose
20 of implementing the Global Fragility Strategy required
21 under section 504—

22 (1) on the basis of—

23 (A) the national security interests of the
24 United States;

1 (B) clearly defined indicators of the levels
2 of violence or fragility in such country or re-
3 gion, such as the country's or region's—

4 (i) ranking on recognized global fra-
5 gility lists, such as the Organization for
6 Economic Co-operation and Development
7 States of Fragility report, the Fund for
8 Peace Fragile States Index, the World
9 Bank Harmonized List of Fragile Situa-
10 tions, the Institute for Economics and
11 Peace Global Peace Index, and the Holo-
12 caust Museum Early Warning Project Risk
13 Assessment;

14 (ii) ranking on select United States
15 Government conflict and atrocity early
16 warning watch lists;

17 (iii) levels of violence, including vio-
18 lence committed by armed groups, state
19 actors, and violent extremist organizations,
20 gender-based violence, and violence against
21 children and youth; and

22 (iv) vulnerability to rising sea levels,
23 flooding, drought, wildfires, desertification,
24 deforestation, food insecurity, and human
25 displacement; and

1 (C) an assessment of—

2 (i) the commitment and capacity of
3 national and sub-national government enti-
4 ties and civil society partners in such coun-
5 try or region to work with relevant Federal
6 departments and agencies on the Global
7 Fragility Strategy, including by dem-
8 onstrating commitment to—

9 (I) improving inclusive, trans-
10 parent, and accountable power struc-
11 tures, including effective, legitimate,
12 and resilient national and sub-national
13 institutions; and

14 (II) ensuring strong foundations
15 for human rights, rule of law, and
16 equal access to justice; and

17 (ii) the likelihood that United States
18 assistance under the Global Fragility
19 Strategy would measurably help to reduce
20 fragility, prevent the spread of extremism
21 and violence, and stabilize conflict-affected
22 areas in each such country or region; and

23 (2) in a manner that ensures that not fewer
24 than five countries or regions are selected, including
25 not fewer than two in which the priority will be pre-

1 venting violent conflict and fragility, rather than sta-
2 bilizing ongoing conflicts.

3 (b) CONSULTATION WITH CONGRESS.—Prior to fi-
4 nalization of the selection of priority countries and regions
5 under subsection (a), representatives from the Depart-
6 ment of State, USAID, the Department of Defense, and
7 other relevant Federal departments and agencies, as nec-
8 essary and appropriate, shall brief the appropriate con-
9 gressional committees on the countries and regions being
10 considered and shall consider congressional input on such
11 prioritization.

12 **SEC. 506. PRIORITY COUNTRY AND REGIONAL PLANS.**

13 Not later than one year after the date of the enact-
14 ment of this Act, the President, in coordination with the
15 Secretary of State, the Administrator of the United States
16 Agency for International Development, the Secretary of
17 Defense, and the heads of other relevant Federal depart-
18 ments and agencies, shall submit to the appropriate con-
19 gressional committees ten-year plans to align and inte-
20 grate under the Global Fragility Strategy established pur-
21 suant to section 504 all relevant diplomatic, development,
22 and security assistance and activities of the United States
23 Government with respect to each of the countries and re-
24 gions selected pursuant to section 505. Each such country
25 and regional plan shall include the following elements:

1 (1) Specific multi-year interagency plans for co-
2 ordination and implementation under each such
3 plan.

4 (2) An up-to-date baseline analysis for each
5 such country or region, including an analysis of the
6 conditions that contribute to violence and fragility.

7 (3) Prioritized descriptions of the goals and ob-
8 jectives for stabilizing conflict-affected areas, reduc-
9 ing fragility, and preventing the spread of extremism
10 and violence in each such country.

11 (4) Descriptions of how and when the relevant
12 goals, objectives, plans, and benchmarks for each
13 such country or region will be incorporated into rel-
14 evant United States country or regional plans and
15 strategies, including the National Security Strategy
16 of the United States, the Stabilization Assistance
17 Review, Department of State Integrated Country
18 Strategies, USAID Country Development Coopera-
19 tion Strategies, and Department of Defense Cam-
20 paign Plans, Operational Plans, and Regional Strat-
21 egies, as well as any equivalent or successor plans or
22 strategies.

23 (5) Interagency plans to ensure that appro-
24 priate local actors, including government and civil
25 society entities, have an appropriate ownership stake

1 in developing, implementing, monitoring, and evalu-
2 ating relevant activities under each such plan.

3 (6) Interagency plans to integrate existing and
4 planned security assistance and cooperation pro-
5 grams in each such country or region with the strat-
6 egy, and to mitigate risks associated with such pro-
7 grams, including risks related to corruption, govern-
8 ance, and human rights.

9 (7) Assessment, monitoring, and evaluation
10 frameworks for diplomatic, development, and secu-
11 rity assistance and activities, which shall be in-
12 formed by consultations with the stakeholders speci-
13 fied in section 504(b), with clear metrics for each
14 such country or region, as well as interagency plans
15 for using such frameworks to adapt such activities
16 on a regular basis.

17 (8) Descriptions of available policy tools and
18 how such tools will be used to reduce fragility, pre-
19 vent the spread of extremism and violence, and sta-
20 bilize conflict-affected areas in each such country or
21 region.

22 (9) A description of how planning and imple-
23 mentation of assistance under the Global Fragility
24 Strategy for each such country or region will be co-
25 ordinated in a manner that strengthens partnerships

1 and leverages the unique expertise and resources of
2 the United States Government and—

3 (A) governments of such countries;

4 (B) international development organiza-
5 tions;

6 (C) relevant international donors;

7 (D) multilateral organizations; and

8 (E) the private sector.

9 (10) A regional component outlining plans to
10 address relevant transnational issues and how each
11 such country is affected by or at risk of regional fra-
12 gility or violence.

13 (11) When a region is selected, a component
14 outlining plans to address factors at the individual
15 country level that affect regional fragility or vio-
16 lence.

17 **SEC. 507. IMPLEMENTATION.**

18 The President, in coordination with the Secretary of
19 State, the Administrator of the United States Agency for
20 International Development, the Secretary of Defense, the
21 heads of other relevant Federal departments and agencies,
22 relevant United States ambassadors, USAID mission di-
23 rectors, geographic combatant commanders, and other rel-
24 evant individuals with responsibility over activities in each

1 priority country or region selected pursuant to section
2 505, shall ensure that—

3 (1) the Global Fragility Strategy required
4 under section 504, including each of the country
5 plans developed under section 506, is implemented,
6 updated, and coordinated on a regular basis; and

7 (2) the strategy is used to guide United States
8 Government policy at a senior level and incorporated
9 into relevant strategies and plans across the United
10 States Government such that the activities of all rel-
11 evant Federal departments and agencies are con-
12 sistent with the strategy.

13 **SEC. 508. BIENNIAL REPORTS AND CONGRESSIONAL CON-**
14 **SULTATION.**

15 (a) BIENNIAL REPORTS.—Not later than two years
16 after the submission of the plans required in section 506,
17 and every two years thereafter until the date that is ten
18 years after the date of submission of such plans, the Presi-
19 dent, the Secretary of State, the Administrator of the
20 United States Agency for International Development, the
21 Secretary of Defense, and the heads of other relevant Fed-
22 eral departments and agencies shall jointly submit to the
23 appropriate congressional committees an unclassified re-
24 port, which may include a classified annex, on progress
25 made and lessons learned with respect to implementation

1 of the Global Fragility Strategy established pursuant to
2 section 504. The report shall include the following ele-
3 ments:

4 (1) Descriptions of steps taken to incorporate
5 the strategy into any relevant, existing country and
6 regional plans or strategies.

7 (2) Accountings of all funding received and ob-
8 ligated to implement each such country and regional
9 plan during the previous two years, and, to the ex-
10 tent feasible, projections of funding to be requested,
11 planned, and implemented for the following two
12 years.

13 (3) Descriptions of progress made towards
14 achieving specific targets, metrics, and indicators for
15 each priority country and region.

16 (4) Descriptions of any changes made to pro-
17 grams based on the results of assessment, moni-
18 toring, and evaluation for each priority country and
19 region.

20 (b) CONGRESSIONAL CONSULTATION.—The Sec-
21 retary of State, the Administrator of the United States
22 Agency for International Development, and the Secretary
23 of Defense shall provide to any appropriate congressional
24 committee briefings on the implementation of this title
25 upon the request of any such committee.

1 **SEC. 509. AUTHORIZATION OF APPROPRIATIONS.**

2 (a) PREVENTION AND STABILIZATION FUND.—

3 (1) ESTABLISHMENT.—There is established in
4 the Treasury of the United States a fund, which
5 shall be known as the “Prevention and Stabilization
6 Fund” (in this subsection referred to as “The
7 Fund”), to be administered by the Department of
8 State and USAID, as appropriate, to support sta-
9 bilization of conflict-affected areas and to mitigate
10 fragility, including through the Global Fragility
11 Strategy established pursuant to section 504, which
12 shall replace the Relief and Recovery Fund.

13 (2) AUTHORIZATION OF APPROPRIATIONS.—

14 There is authorized to be appropriated to the Fund
15 \$200,000,000 for each of the fiscal years 2020
16 through 2024.

17 (3) PURPOSES OF THE FUND.—

18 (A) IN GENERAL.—Amounts authorized to
19 be appropriated to the Fund shall be used—

20 (i) to support stabilization of conflict-
21 affected areas and prevent global fragility,
22 including through the Global Fragility
23 Strategy established pursuant to section
24 504; and

25 (ii) to provide assistance to areas lib-
26 erated or at risk from, or under the control

1 of, the Islamic State of Iraq and Syria,
2 other terrorist organizations, or violent ex-
3 tremist organizations, including for sta-
4 bilization assistance for vulnerable ethnic
5 and religious minority communities af-
6 fected by conflict.

7 (B) AMOUNTS IN ADDITION.—Amounts au-
8 thorized to be appropriated to the Fund under
9 this section are in addition to any funds other-
10 wise made available for the purposes described
11 in paragraph (1).

12 (4) CONGRESSIONAL NOTIFICATION.—Funds
13 may not be obligated under this section unless the
14 congressional committees specified in section 634A
15 of the Foreign Assistance Act of 1961 (22 U.S.C.
16 2394–1) are notified of the amount and nature of
17 such proposed obligation at least 15 days in advance
18 of such proposed obligation, in accordance with the
19 procedures applicable to notifications regarding
20 reprogrammings pursuant to such section.

21 (b) COMPLEX CRISIS FUND.—

22 (1) ESTABLISHMENT.—There is established in
23 the Treasury of the United States a fund, which
24 shall be known as the “Complex Crises Fund” (in
25 this subsection referred to as the “Fund”), to be ad-

1 ministered by USAID, to support programs and ac-
2 tivities to prevent or respond to emerging or unfore-
3 seen events overseas, including to support the Global
4 Fragility Strategy established pursuant to section
5 504.

6 (2) AUTHORIZATION OF APPROPRIATIONS.—
7 There is authorized to be appropriated to the Fund
8 \$30,000,000 for each of the fiscal years 2020
9 through 2024, which shall remain available until ex-
10 pended.

11 (3) PURPOSES OF THE FUND.—

12 (A) IN GENERAL.—Notwithstanding any
13 other provision of law, except section 620M of
14 the Foreign Assistance Act of 1961 (22 U.S.C.
15 2378d), amounts in the Fund may be used to
16 carry out the provisions of the Foreign Assist-
17 ance Act of 1961 (22 U.S.C. 2151 et seq.) to
18 support programs and activities to prevent or
19 respond to emerging or unforeseen foreign chal-
20 lenges and complex crises overseas, including
21 through the Global Fragility Strategy estab-
22 lished pursuant to section 504.

23 (B) AMOUNTS IN ADDITION.—Amounts au-
24 thorized to be appropriated to the Fund are in
25 addition to any amounts otherwise made avail-

1 able for the purposes described in subparagraph
2 (A).

3 (4) LIMITATIONS.—

4 (A) IN GENERAL.—Amounts in the Fund
5 may not be expended for lethal assistance or to
6 respond to natural disasters.

7 (B) ADMINISTRATIVE EXPENSES.—Not
8 more than five percent of the amounts in the
9 Fund may be used for administrative expenses.

10 (5) CONGRESSIONAL NOTIFICATION.—The
11 United States Agency for International Development
12 shall notify the appropriate congressional committees
13 not less than five days prior to the obligation of
14 amounts in the Fund.

15 (6) WAIVER.—The notification requirement
16 under paragraph (5) may be waived if—

17 (A) notification by the deadline specified in
18 such paragraph would pose a substantial risk to
19 human health or welfare; and

20 (B) the appropriate congressional commit-
21 tees—

22 (i) are notified as early as practicable
23 but in no event later than three days after
24 an obligation of amounts from the Fund;
25 and

1 (ii) are provided with an explanation
2 of the emergency circumstances that neces-
3 sitated such waiver.

4 **SEC. 510. IMPROVING AND LEVERAGING ASSISTANCE FOR**
5 **THE GLOBAL FRAGILITY STRATEGY.**

6 (a) SENSE OF CONGRESS.—It is the sense of Con-
7 gress that the President, the Secretary of State, the Ad-
8 ministrator of the United States Agency for International
9 Development, the Secretary of Defense, and the heads of
10 other relevant Federal departments and agencies should—

11 (1) develop more adaptive and responsive policy
12 and program planning, implementation, and scaling
13 under the Global Fragility Strategy established pur-
14 suant to section 504, and work with the appropriate
15 congressional committees to identify any legislative
16 changes that may be necessary to support such ef-
17 forts;

18 (2) better integrate the strategy and other con-
19 flict and violence reduction objectives and activities
20 into other policy and program areas, where appro-
21 priate; and

22 (3) support transparent and accountable multi-
23 lateral funds, initiatives, and strategies to enhance
24 and better coordinate private and public efforts to

1 stabilize conflict-affected areas and prevent violence
2 and fragility globally.

3 (b) OTHER FUNDING AND COST MATCHING.—The
4 Global Fragility Strategy established pursuant to section
5 504—

6 (1) may, after consultation with the appropriate
7 congressional committees, be supported with funds
8 other than funds authorized to be appropriated pur-
9 suant to section 509; and

10 (2) shall seek to leverage funds from sources
11 other than the United States Government in order
12 to promote coordination and cost-matching to the
13 maximum extent practicable.

14 (c) MULTI-DONOR GLOBAL FRAGILITY FUND.—

15 (1) AUTHORITY.—Pursuant to sections 607 and
16 632 of the Foreign Assistance Act of 1961 (22
17 U.S.C. 2357 and 2392), and consistent with sub-
18 section (b), and after consultation with the appro-
19 priate congressional committees, the Secretary of
20 State is authorized to establish funding mechanisms,
21 to include the establishment of a Global Fragility
22 Fund, to leverage, receive, coordinate, and program
23 funds provided by other donors and private sector
24 partners to carry out the purposes of this title.

1 (2) PURPOSES.—A funding mechanism estab-
2 lished pursuant to paragraph (1) should—

3 (A) include input from and participation
4 by key bilateral and multilateral donors, rep-
5 resentatives of civil society, relevant nongovern-
6 mental organizations and private sector entities,
7 and developing countries where fragility threat-
8 ens to exacerbate violent extremism and under-
9 mine development;

10 (B) enhance donor coordination and co-
11 operation;

12 (C) advance clearly defined goals, objec-
13 tives, and metrics for monitoring, evaluating,
14 and measuring progress; and

15 (D) focus on strengthening national and
16 local good governance and conflict resolution
17 capacity in fragile and conflict-affected areas
18 over the long-term through comprehensive, com-
19 pact-based agreements that support country-led
20 strategies.

21 (3) CONGRESSIONAL NOTIFICATION.—Funds
22 may not be obligated under this section except in
23 consultation with the appropriate congressional com-
24 mittees and subject to the notification of such com-
25 mittees of the amount and proposed uses of such

1 funds at least 15 days in advance of such proposed
2 obligation.

3 **SEC. 511. RULE OF CONSTRUCTION.**

4 Nothing in this title shall be construed as a declara-
5 tion of war or an authorization for the use of military
6 force.

7 **TITLE VI—COMBATING**
8 **WILDLIFE TRAFFICKING**

9 **SEC. 601. SHORT TITLE.**

10 This title may be cited as the “Rescuing Animals
11 With Rewards Act of 2019” or the “RAWR Act”.

12 **SEC. 602. FINDINGS; SENSE OF CONGRESS.**

13 (a) FINDINGS.—Congress finds the following:

14 (1) Wildlife trafficking is a major transnational
15 crime that is estimated to generate over \$10 billion
16 a year in illegal profits and which is increasingly
17 perpetrated by organized, sophisticated criminal en-
18 terprises, including known terrorist organizations.

19 (2) Wildlife trafficking not only threatens en-
20 dangered species worldwide, but also jeopardizes
21 local security, spreads disease, undermines rule of
22 law, fuels corruption, and damages economic devel-
23 opment.